THE

AMERICAN AGRICULTURIST.

Agriculture is the most healthful, the most useful, and the most noble employment of Man.—*Washington.*

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A. B. Allen, Editor. Saxton & Miles, Publishers, 205 Broadway.

TO AGRICULTURAL MECHANICS.

We wish to apprize those of our mechanics who are engaged in making farming implements of any kind, that several Agricultural Societies have been formed recently at the south, and the members are desirous of obtaining specimens of all our northern improved threshing-machines, hay and cotton-presses, straw-cutters, corn-shellers, ploughs, cultivators, harrows, &c., &c.; but as many of these are of a high price, they can not feel justified at the present time in ordering them, till they ascertain whether they are likely to suit their purposes. They would prefer to see the venders of them in their part of the country, and would engage to render them every facility in their introduction. But where other engagements prevent northern mechanics visiting the south, the gentlemen composing the committees would engage to pay the freight and charges on all implements sent them for trial and examination; and dispose of them at the original price, and charges out added, free of commission. We give this announcement by request from the south, and can only add, that we know the gentlemen making it to be of high standing and character; and should any of our mechanics wish for further information on this subject, and will call upon or address us post paid, we will furnish them with full particulars. A great change is taking place in regard to agriculture at the south, and the planters there are in want of many implements different from those now in use among them. It is a fine section of the country for emigration.

SPRING WHEAT.

This valuable grain flourishes successfully in many soils when winter or fall-sown wheat will not succeed. Perhaps the best plan of raising it is to plough late in the fall, particularly if the land be a clay or clayey loam, which is the favorite soil for wheat. By ploughing in the fall, the winter frosts thoroughly pulverize the soil, and make it work much freer and easier than it otherwise would the following season. As soon as the heavy frosts are out of the ground in the spring, and it becomes a little warm, give it a second ploughing, and then sow the grain, harrowing it in well, and finishing with the roller.

Another method has been practised with success by an acquaintance of ours. Having his

ground prepared as above some three years since, he commenced sowing his wheat in March, intending to harrow it in as usual, the ground being tolerably well settled and dry. Before the sowing was finished, a violent snow-storm came on, which prevented harrowing in the grain, although the sowing was completed in the storm. A rain followed, which prevented any after harrowing, and then frosts set in, freezing the surface of the ground for some days. Mild weather soon succeeded, the wheat came up finely, grew vigorously, and produced the best crop he ever raised. This *accident* was so successful, that he practised it the next year, by sowing before the frost left the ground, and the crop was like the last, a good one.

The upheaving of the ground by the frost opens it for the reception of the seed; when the frost leaves, it becomes pulverized and levelled down by its action, which sufficiently covers the seed and renders the harrow unnecessary. We have usually sowed our grass seed in this manner, and found that it took better than in any other way. Some farmers thus sow their rye and winter wheat, and although occasionally successful, it often fails, and we can not recommend the practice. The wheat used in the above experiment was the Siberian, a plump reddish berry on a short straw, and it is highly approved in the interior of this State.

ARRANGING CATTLE IN SUMMER PASTURES.

Oxen and steers may run together; cows, heifers, yearlings, and large weaned calves, each class by themselves. Bulls may run with oxen if not ill-tempered. Horses are better alone, and so are sheep. Pastures ought to be divided so as to admit of a change, and it is very desirable to have every pasture watered with a running stream or spring.

EFFECT OF MARLING AND MODERATE CROPS.

We notice in Mr. Ruffin's "Addendum" to his Essay on Calcareous Manures, that he has given a table of crops on his "Coggin's Point farm," with slight interruption, from 1813 to 1842 inclusive, in which the number of acres in wheat were from 78 to 250, and the average yield from 5 to 13½ bushels per acre. The smallest yield was produced on the smallest quantity of land, *unmarled*, while the largest yield (nearly 3 to 1 of the smallest) was produced the last season on the marled. The number of acres in corn during the same time, were from 70 to 188, and the average, from 8⅓ to 25½ bushels per acre; the lowest average being produced on the unmarled, and the highest on the marled land.

The above data from a close observer, shows the very low point which agriculture can reach by injudicious management, and also the very great increase which may be attained by careful management. The best yields, considering the great number of acres cultivated, and on land reclaimed from a perfectly exhausted condition, exclusively by the use of marl, shows good management, and a rapid improvement.

HEREFORD CATTLE.

Among the various importations of improved stock, which have been made from time to time into this country, few are likely to become more distinguished, than the splendid herd of Herefords brought over here within the three past years, by Messrs. Corning and Sotham of Albany. We had merely seen a few specimens of them in the summer of 1840, but had no idea of the large fine herd there till we visited it last December. We found them located on a beautiful farm lying on the west bank of the Hudson, about two miles below Albany, and in winter quarters. The buildings for their accommodation are not expensive, yet ample; with abundance of yard room open only to the south, and well protected on the other three sides by the barn and sheds. The arrangement of these buildings, both interior and exterior, struck us as among the most convenient we have ever seen, and we hope we may be furnished with a plan of them hereafter, to embellish a page or two of our paper.

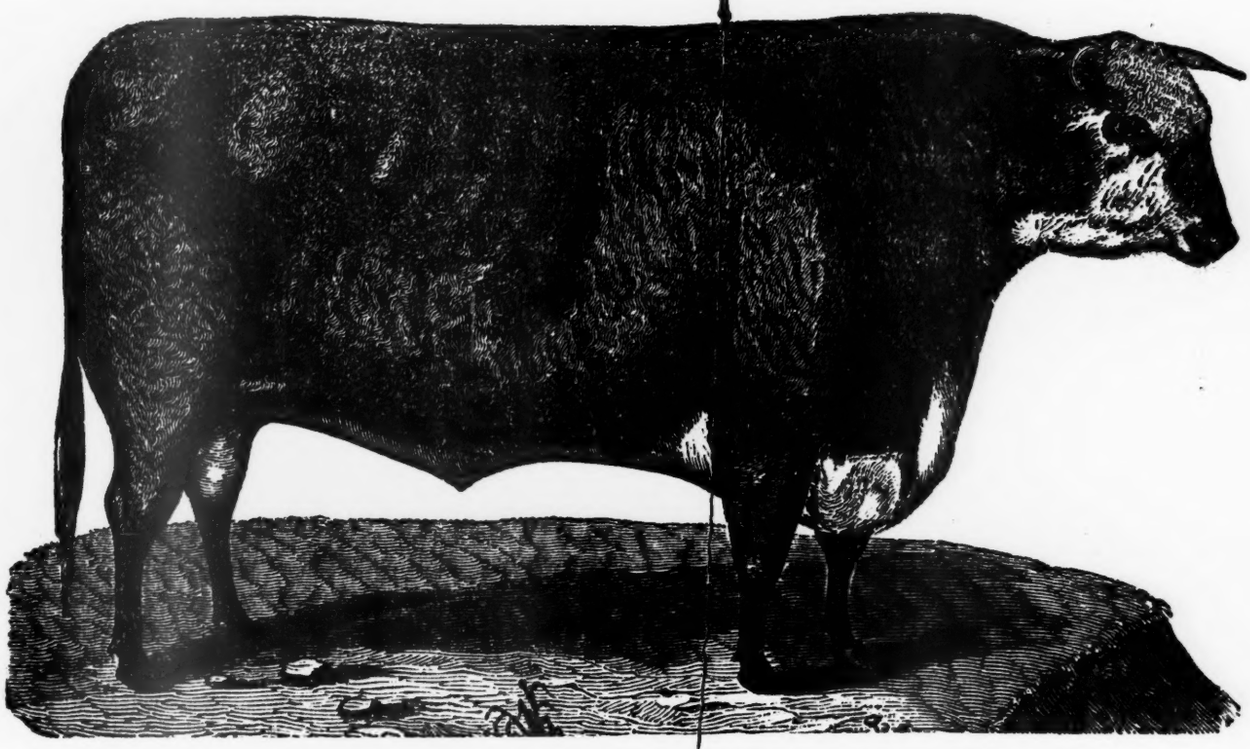
Since Youatt wrote his work on British Cattle, there has undoubtedly been a very great change for the better in Herefords; and we question whether any breed in England, has been more generally improved within the past twenty years. We must confess that we were greatly surprised at the superb show that they made, at the various agricultural society meetings which we recently attended in England, and certainly one of the finest lots of cattle we ever saw, was a large herd of pure Hereford steers, grazing upon the banks of the Thames, in the neighborhood of the magnificent old town of Oxford. As fat cattle, the Herefords have lately held a sharp rivalry with the Durhams, and their beef is in high favor in the London markets. They make no claim as yet to being great milkers; but this is a quality in the animals which can be improved, and we understand the most eminent breeders are beginning

to pay attention to this point, and we trust that they may meet with success, for we are the friends and well-wishers of improvement in all things.

We think the stock at Albany would compare favorably with the best we met of this breed in England; and well they may, since Mr. Sotham had much experience with Herefords there before coming to this country, and he crossed the Atlantic twice from New York, for the express purpose of making his own selections; and we think he chose with a good eye and much judgment. We found these cattle to excel particularly in the brisket and loin, two very important points in all animals destined for the butcher, and especially necessary, if we expect to make them into beef for the English market; and being of great constitution and hardy, they make most excellent grazing stock, and are consequently somewhat sought for in various parts of the United States for this purpose. We also found them much better handlers than we expected, and with good coats and reasonable fine skins.

Mr. Sotham was so unfortunate as to lose his very fine bull Major, on his voyage out from England last year, which was much to be deplored, as he was said to be equal to anything ever bred there. But in Sir George, we found quite a superior animal, and we here introduce a cut of him.

HEREFORD BULL SIR GEORGE, IMPORTED.—(FIG. 1.)



The Property of Messrs. Corning and Sotham, Albany, N. Y.

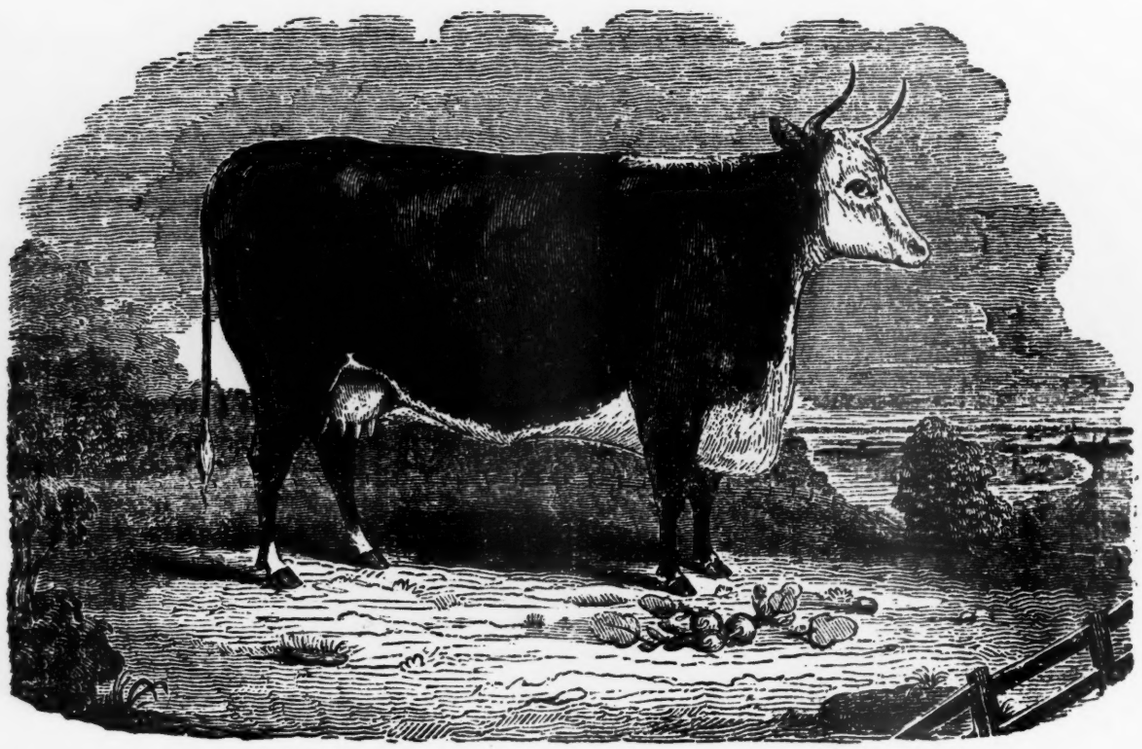
This bull is improving with age, and when full grown will make a large and handsome show. In another stable alongside of him was Young Prize. His frame is not quite so large as that of Sir George, but if we recollect right, he is somewhat finer and more finished in his points. He also shows great constitution, and will undoubtedly make a superior animal.

Beyond these came a lot of bull calves, one of which struck us as of uncommon promise, and he stands in such high favor with his breeder, as leads him to believe that he may yet make the place of Major good. We trust these bulls will not be neglected by those engaged in rearing working cattle, and that they may be effectually tried in crossing on the native stock for this especial purpose. We have seen repeated crosses of this kind throughout the United States, from Hereford bulls far inferior to this importation, and the improvement was quite manifest. We recollect particularly, a recent instance of this kind, in visiting the extensive rice plantation of Mr. Zeranqué, on the Mississippi, a little above New Orleans. He kept about 70 head of working oxen, and among them all, there was nothing equal to a few specimens of the cross of the Hereford, either in size

beauty of form, or strength, quickness, and endurance in the yoke.

There are twenty-three full bred Hereford cows to calve in the spring in this herd, and an excellent even lot they are too. The queen of these for the present is Matchless, and right well is she named, for there are few animals of any breed within our knowledge that can beat her in form and quality, and we regret that the cut we have of her does not more fully represent her size and massiveness. It is, however, a tolerable portrait, and shows her great brisket and fine loin advantageously. Perfection is a noble large cow even now, though only 3 years old; and Victoria, Matilda, and Gay, are much to be admired. Some of them, Mr. Sotham thinks, will prove good milkers. He is determined to see what they can do in this way, and give us the result of the trial.

HEREFORD COW MATCHLESS, IMPORTED.—(FIG. 2.)



The property of Messrs. Corning and Sotham, Albany, N. Y.

COTSWOLD SHEEP.—After looking over the cattle pretty thoroughly, we next examined the sheep, and must confess that we think it the best Long-woolled flock that we have yet seen in America. These Mr. Sotham also selected himself, and imported. They were chosen from the celebrated flocks of Mr. Hewer and other eminent breeders of Cotswolds. These animals are of great size, and yet very fine generally in all their points, much more so than people unacquainted with the breed could suppose. We should think the largest would weigh at least 250 pounds dressed, if well fattened; their weight of fleece is in proportion. Fat-rumps sheared 14½ pounds last year; and Splendid, a perfect model we were going to say of this breed of sheep, gave 11 pounds. The lambs at one year old average within a fraction of 9 pounds each, and the breeding ewes full 8 pounds, which is certainly a great yield. The wool is very long, and is such as the English manufacture their worsted goods from. The animals are small consumers for their size, and are the most quiet things imaginable.

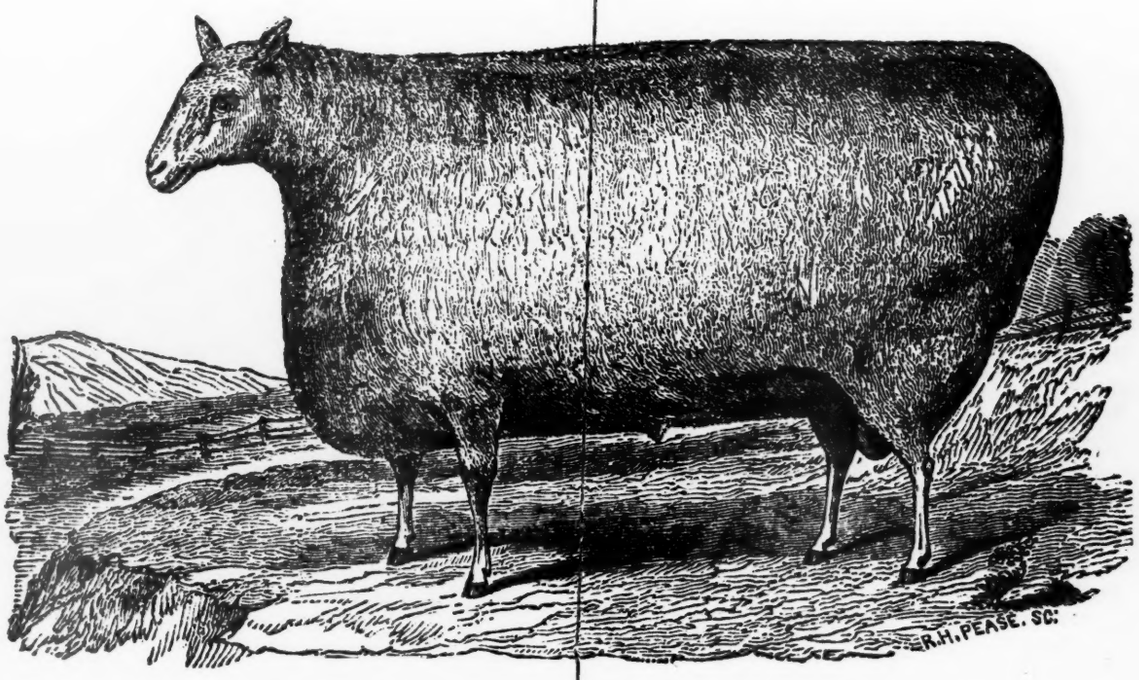
We give a cut of one of these Cotswold bucks on another page, that the reader may be enabled to understand more fully what we are talking about, and subjoin extracts from a letter also upon their origin and breeding, which Mr. Sotham has been so obliging as to forward us.

When I was last in England, I endeavored to trace the origin of the Cotswold breed of sheep, but could not succeed with sufficient certainty earlier than the year 1798. I found that the Cotswolds at that period possessed very long faces; long, thick ears; heavy, curly fleeces; high shoulders, and raw backs; but invariably good rumps, and *legs of mutton*, denoting very strong constitutions,

and were principally kept on the Cotswold Hills in Gloucestershire.

Many improved them by crossing with the Leicester, which was undoubtedly an excellent cross, when a judicious selection was made; but the majority of their owners, wishing to reduce their size and give them more symmetry, adhered to the finest Leicester with their short ears, short faces, fat backs, small bone, and a finer quality of wool, thinking such a course would produce their object; but the result was unfavorable, for they found when they lost their thick ears and curly coats, that they also lost their constitutions. My opinion is, that the curly, silvery skin is a good criterion of early maturity, a right quality of flesh, and a hardy animal.

COTSWOLD BUCK SPLENDID, IMPORTED.—(FIG. 3.)



The Property of Messrs. Corning and Sotham, Albany, N. Y.

I have always noticed on shear-days, that this kind of fleece covers more and a better quality of flesh than the finer or longer fleeces; and I maintain that a *practical man*, when shearing a sheep, can tell by the cut of the wool whether it grew from a *good root*. I have remarked this often to many of the best old shepherds (with whom I have sheared numbers, joining them in their merry jokes and cheerful songs of *sheep-shearings*), and they would readily agree with me, and always persuade their masters to keep such kind of ewes as long as they would breed a lamb, so that they might obtain the whole flock of that description. They found they would keep on less food, were less trouble, less liable to disease, and always in good condition.

I have an idea that a person will remember the points he wishes to improve, far better when shearing than at any other time. A *good shepherd* knows the features of each sheep, equally as well as he does those of his own children, and *remembers* their faults when he discovers them, therefore when culling his ewes he refers back to shear-day; this I know to be the fact, and such close observation is absolutely necessary, to give credit to a flock.

Those who selected a ram with a good curly skin from the Leicester, made vast improvements on their flocks, but it was the close observation of a faithful shepherd that opened their eyes to it, when the breeder himself had not gone through the whole *practical part*, which I would strongly recommend, as it is the only sure way of knowing the facts; and let me tell you, there are many of the first breeders that depend altogether on their shepherd's selections, and they take them to several different ram-sales before they select one to their taste. Time is not thrown away in searching for good males, nor is the purse *ultimately* diminished by giving a *good* price. If *judgment directs the hand* of either master or shepherd, the flock will keep its standing; but I have seen in many instances, where flocks have very much degenerated by the absence of the latter.

There are many of the Cotswold breeders who say they have not a drop of Leicester blood, but have improved their symmetry by a close attention to the smaller male of the original, with a fat back and curly skin in view, still keeping their long faces and ears, rumps and legs of mutton; thus producing earlier maturity, a better mixture of fat and lean, than the Leicetser cross.

This seems to me *practical reasoning*, for the butchers *all* say, that if the Leicesters had more lean and less fat, they would suit their customers much better. I allow that the Leicester men, and those who crossed from them, have won more prizes than the Cotswolds, because symmetry is always observed in every male animal, and the latter have not had time to arrive at perfection. I believe it is candidly admitted that the Cotswolds are decidedly the most profitable sheep in the world, and will soon be able to carry away the first premiums.

We can make the same observations upon the keep of the above stock, as we did on that of Col. Sherwood and Mr. Prentice. We found the cows living upon rye-straw, with a few turneps, and the sheep the same. We believe, as a matter of health, and for the purpose of giving a greater variety to the food, the young animals had a little oil cake. This is highly approved of in England for the young of all kinds of domestic stock, as it keeps the bowels open, and generally prevents scouring or costiveness; it also gives a good tone to the stomach, and seems to make them relish all their other food much better; and our own experience of several years of feeding oil-cake in small quantities, confirms all that has been told us of its good qualities.

Tour in England. No. 12.

English Fences.—These are of various kinds, the hedge, however, predominating; and no one feature adds more to the rural beauty of the country than these living walls of verdure,—picturesquely dividing it in a thousand devious ways, and making many a spot, that would otherwise appear desolate and bare, look charmingly pretty and inviting. Quite a variety of shrubs and trees are made use of here for hedges, but those we most admired were the holly. This is somewhat different from the American holly,—its leaves being variegated with yellow spots, and it has small thorns, like our *Ilex opaca*, protruding from their edges. It is an evergreen, and adds greatly to the beauty of the winter landscape. In front of the house, and around the ornamental grounds and gardens, portions of the hedges are trained in what is termed *topiary* work. This represents any animal, a deer for example, in a recumbent position, with head and antlers erect; a peacock, with its tail wide spread; a castle, a summer-house, or some other fantastic piece, which the *very nice* often take upon themselves to laugh at as stiff and studied; yet to us these things have a great charm, for they seem to harmonize with the scenery and the antiquated buildings around; and we have often paused to contemplate this fancy work of the rustic hedge-clipper, with a vague, indescribable satisfaction, thinking, perhaps, the same hand that guided the hedge-shears, might, under more favorable circumstances, have won renown with the pencil or chisel; for it is our humor to clothe all things as often as possible in the beautiful, and imagine the illustrious. In this way, wandering along the world, we have cheated many a dull hour of its tediousness and melancholy.

Next to the holly we admired the gorse or furze; a sharp, prickly shrub, growing to a height of five feet or more, and bearing a yellow blossom. But the most common hedge here is the hawthorn; and this upon the whole is perhaps the best. We do not think its foliage equal to that of the maple and other varieties of the thorns of our own country; its blossom, however, is quite as pretty, and much like it, and comes out about the same period of the year as in New-York. Its growth is not near so rapid as our own hawthorns, nor is it as suitable for our climate, and when cultivated here as a hedge, has generally proved a failure.

The general method of growing hedges in England, is to dig a ditch along the line where it is to be planted, four to five feet wide, and two to three feet deep, and plant the thorn upon the embankment made by this excavation. This method has a double advantage; for it makes a good ditch, which is highly necessary to assist in carrying off the surface water in this moist climate, and the earth thrown up from it, forms an excellent bed, with a double depth of soil on which to plant the thorn; and the fence thus grows more rapidly and stronger than it otherwise would. The ditch and embankment also add to the strength and security of the fence, making it more difficult to get over.

Before setting out a hedge, the land along the line is generally put under cultivation the previous year, so as to get it mellow and in good tilth. A potato crop is the best preparation, and the quicks are usually of the second year's growth, and taken up from a bed where they are cultivated for this purpose. They are planted about six inches apart, in double rows along the line, the quicks of the second row being placed opposite the centre of the space occupied by the first. Sometimes, when a very strong fence is required, three rows are planted; but two are generally sufficient, and we have seen quite good hedges formed from a single row alone.

An important point in the management of the

hedge, is to keep it thick, especially near the ground; and in order to effect this, it must be grown broader at the base than the top, so that every part may have the benefit, in an equal degree, of moisture, light, and air. The best, therefore, are trimmed every year to a width of five feet or so at the bottom, and nearly sharp at the top, giving the hedge the form, on both sides, of the steep roof of a house. Yet they flourish very well here trimmed in a rounded form at the top, which is a more graceful shape for them; and we have frequently seen a good strong fence of the hawthorn, growing up in a natural way, seven to ten feet high, and still so close at the bottom, as to be completely impervious to domestic animals above the size of a large rabbit. If we recollect right, when thus left to grow naturally, the quicks were planted closer together than when in double rows.

In those districts where stones abound, they are much used for fences, and are laid up in a handsomer and stronger manner than we are accustomed to at home. We have seen miles after miles of them along the highway, especially such as enclose the parks, pointed with as much neatness as the mason's work of a house. The ugly zig-zag fences which are so common in the United States, are unknown here; neither is our more sightly post and rail fence to be seen, timber being too scarce and valuable for such purposes. Posts and sawed stuff are occasionally found; but what is more common, is to set posts about eight feet apart, and mortise the bars into them, one at the top, and the other near the bottom, and to these nail thin slats, four to five feet long, split out in the same manner as we rive staves, and put them on perpendicularly to the cross pieces. This makes a close good fence, and when whitewashed, with rows of trees planted along the line, it presents a very neat appearance. Clay walls, built *en pisé*, are not sufficiently common to speak of in England, the climate being altogether too moist for them to endure long, as a general rule.

The last method of fencing which we shall mention is embankments. These are laid up, slightly sloping with dirt, about four feet high, excavated from a ditch running along the line of the fence, and are then sodded up their sides and on the top. This makes a much better fence in a tenacious clay soil than we could have supposed; and the only objection is, that the sod is very liable to work out in squares, leaving the earth then to crumble down, and the fence in continual want of repair. In a climate of the severity of the winter of our northern and middle states, a sod fence would not answer at all; for the frost would cause it to crumble badly every spring upon being liberated from the ground.

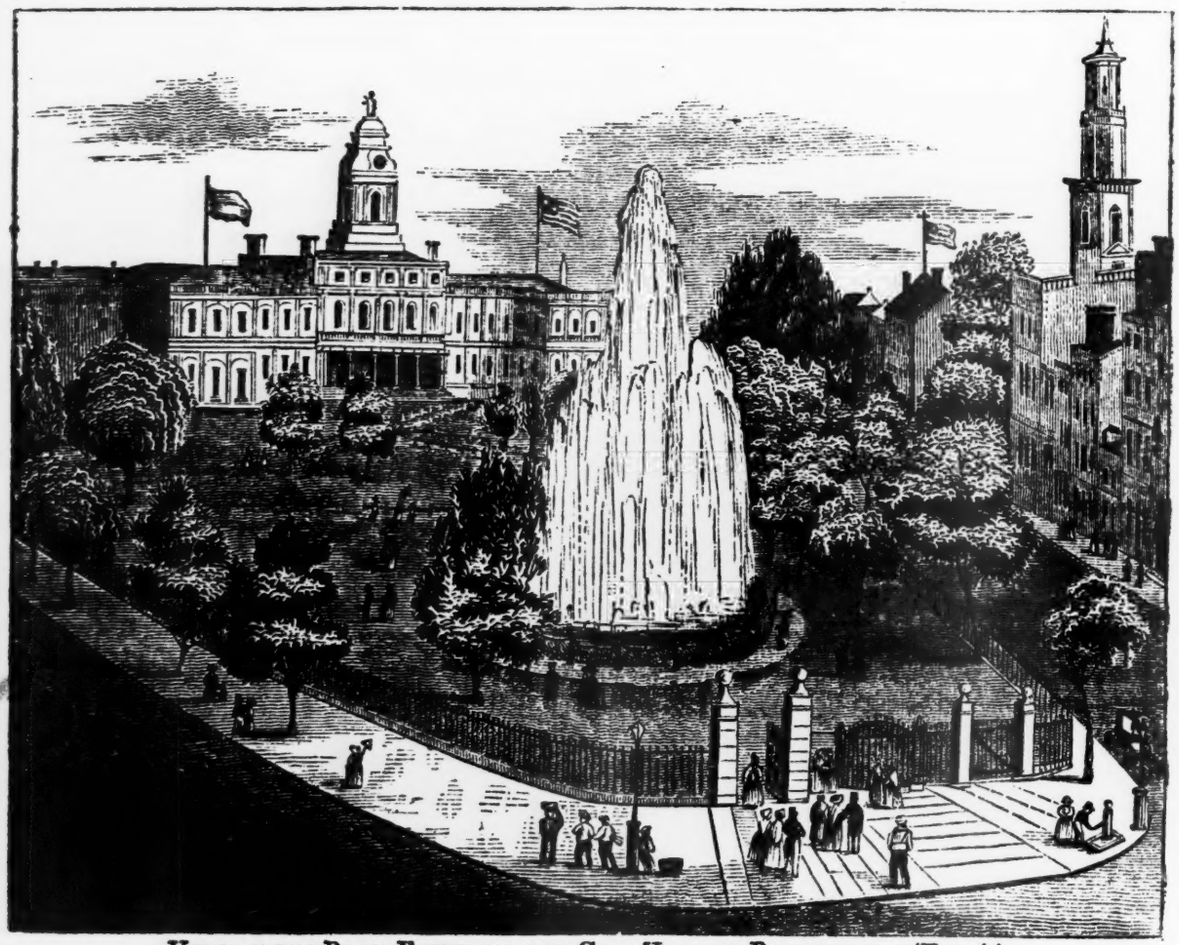
Some districts in England are only fenced round the pasture portions of the farms, for the range of the stock, leaving all the rest open to tillage. Other portions of the country have no fences at all, except for yards around the barns and sheds. The flocks and herds are kept as on the continent, by herdsmen and shepherds with their dogs; and the animals being brought up to this mode of pasturing, are not unruly at all, but gentle and tractable, and are easily retained within their limits with scarcely any trouble. When we first visited Europe fifteen years ago, we were convinced that this would be the best method to adopt in America. We have often wondered, that our intelligent and high-spirited countrymen would so long and so tamely submit to the intolerable burden of fencing against their neighbors' unruly cattle; and are satisfied, that if the subject could be placed before them in its true light, they would not be much longer. We know of no part of the United States which is unfenced, except a portion of the beautiful valley of the Connecticut; and if any one is desirous to see how easily this system can be carried into effect, and what an immense saving it proves to the landed interest of this section of the country, he would do well to make a visit there and judge for himself.

Another very pleasing feature in the fences of England, and which has been adopted to a greater or less extent in the older settled parts of the United States, are the rows of trees and belts of forest planted along their lines. The shade of these, in this cool, moist climate, does not seem to essentially injure the growth of the hedges, although beneath our more sunny sky, we are satisfied that they would. Rows and belts of shrubbery and trees along the margin of the road, and up and down the division fences of the estates, give England an appearance in the distance of being a well-wooded country; and in the early part of June, when the hawthorn is in full bloom, the fields look as if enclosed by walls of flowers. It is a charming country, made so principally by the hand of man, and with our decided rural predilections, we wandered over it with a pleasure we can not describe. Would that more of our countrymen engaged in farming operations could visit it; we are satisfied that they would generally return to their homes, determined to cultivate less land, and in better style, and do more to adorn its surface. There are many estates in Great Britain

which art has made perfect pictures almost, and everything about them is disposed with as much taste as if they were destined to be immortalized on canvass by a Claude de Lorraine.

A RURAL WALK IN THE CITY.—No. I.

It is acknowledged, that New York is the fountain-head of America for literary, commercial, and political information, and the very best point for the publication of a leading journal on all these subjects; but when we started this paper, it was thought by many, that it was no place for issuing an Agricultural Periodical. We trust that something has been done by us the past year to prove the contrary, and we hope, ere this volume is brought to a close, all will agree, that we could not have chosen a point in the Union, combining so many advantages for the successful publication of an agricultural journal as New York. We would respectfully ask our readers, is any place in America so open to agricultural information, either at home or abroad, as this city? and where is the neighborhood abounding with such extensive greenhouses, gardens, nurseries, orchards, and admirably-cultivated farms of every variety of soil? Nor is this vicinity so deficient in good stock as many imagine; indeed, few states in the Union can make as great a show of splendid improved animals, as may be found within a few hours' sail or ride of New York, and we trust, in the course of a few months, to make all these things somewhat more apparent to the public than they have hitherto been.



VIEW OF THE PARK, FOUNTAIN, AND CITY HALL, IN BROADWAY.—(FIG. 4.)

Of the many pretty rural spots in this city, such as the Battery, the Park, St. John's, Union, and Washington squares, enclosed by strong ornamental iron fences, and tastefully planted with trees, flowers, and shrubbery, we might dwell with much pleasure, and perhaps interest to such of our country readers as have never visited this populous place; but we at once pass over the subject, merely adverting to some new features recently introduced into these fine public grounds, and these are the fountains supplied from the Croton Aqueduct, and throwing up numerous columns of water in beautiful *jets d'eau* from 50 to 70 feet high, in every place appropriate to adorn them.

A profound writer on "The Age of Great Cities," says:—

"If anything be certain, it would seem to be, that man is constituted to realize his destiny from his association with man, more than from any contact with places. The great agency in calling forth his capabilities, whether for good or evil, is that of his fellows. The picturesque, accordingly, may be with the country, but the intellectual, speaking generally, must be with the town. *Agriculture* may possess its *science*, and the farmer, as well as the landowner, may not be devoid of *intelligence;* but in such connexions, the science and intelligence, in common with the *nourishment of the soil*, must be derived, in the main, from the *studies prosecuted in cities*, and from the *wealth* realized in the *traffic of cities*. If pasturage is followed by tillage, and if tillage is made to partake of the nature of a study and a science, these signs of improvement are peculiar to lands in which cities make their appearance, and they *become progressive only as cities become opulent and powerful.*"

How true this is in regard to agriculture in the neighborhood of the great city of London, containing upward of two millions of inhabitants, let any one who has visited inform our readers. The most able, and by far the greatest number of the agricultural periodicals in Great Britain are published in London. But to our point in hand.

Seed-store of Mr. George C. Thorburn, in John Street.—Taking Broadway for our line, about half a mile from the Battery, we diverge into John Street, and in the first square on the north side, we come to Mr. Thorburn's seed-store. It is a brick building four stories high, and the front of the first half is occupied by a large show-window, 14 feet in length, 10 feet high, and glazed with the finest French plate-glass, the two centre squares of which are each 5 feet by 4, and polished like the best mirrors. Here the choicest varieties of Camellia, Japonica, Heaths, Correas, Roses, &c., are constantly exhibited in flower, and occasionally some of the most beautiful exotics, such as Hybrid, Rhododendrons, Chorozemas, and other shrubs and plants, making a splendid show that is truly delightful even to the most hurried passers-by to pause and look at.

The interior of this store is quite spacious. It is 130 feet deep, the whole of which is thrown into one room. The walls are covered with pictures on one side, interspersed with garden and nursery implements tastefully displayed, while the other side is fitted up with numerous seed-drawers and shelves, filled with porcelain flower-pots, vases, and glass globes with water in them, and gold and silver fish playing about, while on each side, resting upon the floor, are long rows of bins, filled with all sorts of peas, beans, grain, and roots.

Up stairs is a spacious picture gallery, containing a select collection of fine paintings and engravings of plants and flowers, of some of the most interesting subjects of English and American history. Here also is quite an aviary of Canary and Mocking birds, enlivening the room from morning to night with their cheerful melodious tones. How often, when tired of the counting-room, in former years in this city, have we come here, before the establishment was half its present size, and stood back from the street with its pretty front yard, to enjoy a sight of the plants and flowers, and listen to the sweet song of the birds. Altogether, we suspect that this is the largest, most varied, and showy seed establishment in the United States, and it is well worth visiting by all strangers coming to the city.

Seed-store and Green-house of Mr. Smith, 385 Broadway.—From Mr. Thorburn's we return again to Broadway, and what a change from the quiet John Street. One is half stunned with the clatter of iron shod-hoofs, and the rumble of carts, omnibusses, and carriages; and along the spacious foot-walks is a crowd of pedestrians, and among them are flowers of a different order than those we left at Mr. Thorburn's; but of these it does not become us to speak, as they do not happen to be in our line: so, fair ladies, in gay bonnets and plumes, and dazzling dresses, and looking as smiling and rosy as you please, in gay groups, pass on.

Though not as large as Mr. Thorburn's, Mr. Smith has an excellent establishment. He makes all his own importations, and is as careful as possible in their quality as well as those raised for him at home. Such as we inspected we found good, and were especially pleased with the samples of Imperial oats which he showed us. They weigh from 43 to 46 pounds to the bushel, have a thin light husk, and seemed to contain a great amount of farina. These oats were originally imported four years since, and are now well acclimated—the price is $1.50 per bushel. Mr. Smith has a pretty green-house in the rear of his store, where he keeps the usual variety of plants and flowers for sale; he has also extensive ranges of glass out of town, for the purpose of propagating and supplying the city establishment.

As we passed into the green-house at the left, occupying a large niche to itself, we observed a very splendid specimen of the Rhododendron Altaclarensis in full bloom. It is a magnificent

shrub really, and well deserves the attention of florists, and the high favor in which it stands with the amateurs of flowers.

Seed-store and Conservatory of Mr. Dunlap.—Keeping up the east side of Broadway till we reach No. 576, we come to Mr. Dunlap's, and we had no idea of the extent of this establishment, till we walked in, and thoroughly examined it. The seed-store is 22 feet square or so, and the conservatory immediately joining it, is the most splendid affair we have seen in the United States. The grand range is 2 feet wide, 15 feet high, and 200 feet long; then there are side ranges in addition of nearly 100 feet more. In the centre of the long range is a walk 6 feet wide, laid down in wood, and painted in diamonds. On each side of this is a deep green moss edging, and over these are pretty ornamental stands of various fashions for flowers, and on either hand of the long aisle, stands a thick wall of dense foliage and flowers of Oranges, Lemons, Pittosporums, India-Rubber trees, Acacias, Eugenias, Oleanders, Sparrmanius, Palins, Magnolias, and Rhododendrons, thickly spreading out, and averaging a height of 12 to 15 feet. Aside from these there is a great variety of rare and curious plants, and as one example of the number displayed here, the proprietor stated that there were upward of 2,000 Camellias alone. We found here the *Cycas Revolutum* or Large Palm, standing some 8 feet high, with its Corinthian-like crown, containing hundreds of seeds, and contrasting superbly with its feathery green leaves, full 3 feet in length. This is a great curiosity, and is much admired. We also saw several of the *Agave Americana* or Century Aloe. One is said to be the largest in the United States. It is twice the size of that of the Patroon which was in flower at Albany last fall, and occupies an entire house by itself, 15 feet square.

Mr. Dunlap heats his conservatory with hot water, which is carried through its whole length in double rows of iron pipes. We found, when in England, that steam or hot water used exclusively in heating conservatories, was objected to, as causing the air in them to become too damp; but in our drier climate we are informed that they are not injurious, except perhaps in extreme cases, which of course must be guarded against and obviated. Overhead in the conservatory is a line of cages for singing birds, and at the further end is a large circular stone basin of water, with gold fish playing their gambols in its depths.

Having exercised our feet pretty satisfactorily, we now crossed over for a call on our friend, Dr. Field, in the Third Avenue, who, being quite an amateur farmer, and hearing of our projected walk, determined it should be changed to a ride, and immediately ordered his gig-horse out for the purpose of accompanying us on the remainder of our excursion. And here we found a capital specimen of the well-bred and well-broke New York trotter in the Doctor's horse; for he is gentle, playful, and spirited; will stand anywhere in the noisy streets of the city without hitching, and is equal at all times on the road to a mile in four minutes, and would probably, with a little training, accomplish it with ease in three.

Mr. Emmet's Durhams.—We trust that we shall be pardoned in giving a brief notice of a call at the tasteful private residence of one of our most estimable citizens, Thomas Addis Emmet, Esq.; for in more ways than one, he has made himself a part of our public property. But we will not dwell upon this subject. The residence is prettily situated near 57th Street, and commands a fine view of the East river and the adjoining country; and with its ample garden and ornamental grounds, embraces about 20 acres, making quite a city farm. Of course one can not expect to find here a herd of Short-horns, that will count in number with those of a Kentucky planter, but what few there are, we found in fine order, and bred as a matter of taste and fancy by Mr. Emmet himself. His cow Celeste is a fine specimen in form of the Durham, and one of the most famous milkers in the country. Pasturing on a meadow just below the house, and without other food than the grass she obtained there, she gave for some time last summer, from 29 to 33 quarts of milk per day of an excellent quality, and was now giving 8 quarts a day, though several months gone with calf.

Ever-bearing Raspberry.—The conservatory was well stocked with plants in full bloom, but the season is so cold and backward this year, that vegetation can scarcely be said to have begun, and of course we could find little attraction at this moment in the grounds and garden. Our attention, however, was called to a variety of the Ever-bearing raspberry, very different in appearance from that of Ohio, described on page 5 of Vol. I. of the Agriculturist. Its branches are smaller, and it is destitute of the prongs at the end of them, necessary for self-propagation. Its fruit also is different, Mr. Emmet informing us that it more resembled the purple Antwerp than any other variety which he cultivates. It usually ripens about the 15th of July, and continues bearing till cut off by the frost. It was originally procured by his father, the late

distinguished Robert Emmet, Esq., from the Botanic Garden of Dr. Hosack; beyond this Mr. E. could not trace it. Any one desirous of obtaining this variety of the raspberry will be freely furnished with cuttings.

Anthracite-Coal Ashes.—It will be seen that we were correct in our opinions of the supposed value of these ashes for manure, by a quotation in our February No., which we gave of an experiment made with them by the Editor of the American Farmer. Mr. Emmet has made use of them for eight years as manure, and finds them beneficial; especially in assisting to lighten a heavy soil, and render it more friable and easy to work.

TO OUR READERS.

We trust when you have got to the end of this Number, that you will be satisfied that we have given all the improvements promised in our last; and if you will only encourage us in our good work, we shall continue to go on and add others as it will afford, for it is our intention to make this indisputably the leading Agricultural paper of America. The price at which we offer this periodical is within the means of every person, and we shall look for a large and steady increase to our subscription list. We shall send this number to all the subscribers of Volume I., and we hope that they will take pains to show it to their friends and solicit subscriptions. No subsequent numbers will be sent till the money is remitted in full for the Second Volume, for we can not deviate from our terms.

At our present terms, Three copies for Two Dollars, or Eight copies for Five Dollars, the American Agriculturist is among the very cheapest books of the day; and what is more, we can add with a clear conscience, and without a single spark of vanity, we think it one of the *most entertaining* and *instructive*. Our Correspondence now is rich, varied, and extensive; and will be enlarged still further, more especially in Europe; then we are regularly in receipt of all the Agricultural journals of any value, both at home and abroad, besides everything in the way of books as fast as they appear. These advantages, combined with those of our central and commanding situation, will enable us to keep our readers promptly and fully acquainted with everything of interest upon this great and all-absorbing subject.

Sugar-Beet.—We have to apologise to our readers for the non-appearance of the article on the Cultivation of the Sugar-Beet. It is in type, but could not be got in for want of room. We might have easily filled two numbers of our paper with editorial and other matter at present in hand.

Fast Trotting-Horses.—We have just received several orders for fast-trotting horses, either matched or single. Those who have them for sale, will please address us post-paid immediately, stating price and all particulars regarding them, as we wish to fill the orders without delay.

The following was received by mail, two days too late for insertion in our last, for which it was designed.

The undersigned, having been unavoidably detained in Buffalo since issuing the December number of this paper, and having pressing claims upon his attention, which will probably continue to detain him there, reluctantly withdraws from the responsibility of editorial duties, to which he is unable personally to attend. He can not but hope, however, that an intelligent public may continue to sustain not only this, but all well-conducted agricultural papers. They owe this to themselves, to their children, their country, and the human race.

It is estimated that there are now published in the United States, 135 daily, 1140 weekly, 125 semiweekly papers, 205 monthly, and other periodicals of a general character, not one of which makes agriculture the leading object of its attention; while the number of such as are exclusively devoted to this subject, does not exceed 25, most of which are monthly, are issued at a low price, and enjoy for the most part, but a very small circulation. When to this limited range of agricultural periodicals, we add the consideration, that they relate to the sole occupation of three fourths of the productive population of this country, which contributes at least an equal proportion to our aggregate national resources, it may well be thought singular, that a majority of our citizens are so utterly neglectful, not only of their individual interests, but of those also which so materially affect the whole community.

It was with these views of the vast importance of the subject, and the too general indifference to its great principles, and more improved and scientific management, that induced the undersigned for a time to lend his feeble aid to the great cause of agricultural advancement in the United States. No circumstances or observations since made, have produced any alteration in his views; and it is a source of gratification to be assured, that while some may find it necessary to quit the field, others are pressing into it, with the full determination not only to sustain, but carry this great movement onward. May its progress be such, as its intrinsic merits and paramount utility demand.

Although unable to devote that attention to the paper he has heretofore done, the undersigned yet hopes occasionally to meet the instructive correspondents of the American Agriculturist in its columns, on common ground, to interchange such views and sentiments, as may tend to mutual interest and instruction. Richard L. Allen.

Buffalo, Feb. 15, 1843.

ORIGINAL CORRESPONDENCE.

For the American Agriculturist.

SHEEP HUSBANDRY.—No. 2.

Where is the best sheep country?—In my last communication, I alluded to the national character of your publication, as being one of its distinguishing merits. It has, to me, another very attractive recommendation, its promise of becoming the leading work of the United States on the subject of *stock*. I do not mean *bank* or *rail-road* stock, but a kind which is far more interesting and profitable to farmers—*live* stock. If you do not make it the best periodical on that subject in the whole world, it will be *your own fault*.

Now for the promised topics, "the *best kind of sheep*," and "the *region of country best adapted for them*," within the limits of the United States.

First, for the district of country naturally best adapted for *profitable* sheep farming—*where is it?* And on this point I would myself be an inquirer. Surely some of your many intelligent friends and correspondents in every section of our wide country, can afford us *light* on this important subject. In my former contribution to your columns, I threw out the suggestion that it was somewhere *out* of New England; and, if we may trust an opinion from a distinguished source, it is not in Vermont, that region which was formerly regarded as being, *par excellence*, the *best* sheep district of the whole United States. It is, no doubt, a pretty good sheep country, as is proved by the *fact* of wool-growing having been extensively successful and profitable there; that state having sometimes produced about ten per cent. of the whole quantity raised in the United States. But hear what the Governor of Vermont says, in his recent Message to the Legislature of that state: "The rich and almost boundless plains of the great west are becoming covered with flocks of sheep, which will soon furnish supplies of wool, in such abundance, as I fear, may seriously affect the sale of our own." This does not look as if Vermont, or New England, or even the old northern states were the *only* or the best sheep country. The Governor of Vermont is, without doubt, correct in his anticipations, that the prairies of the west will, ere long, produce a great quantity of wool. They can, no doubt, raise it at less cost than in the old northern states, and of *quite* as good quality; while, on so valuable an article as wool, their distance from market, and the cost of transportation, is an item of but small relative consequence. But, so far as I can learn, they will, at the west, throughout all the prairie country, have to incur the expense and trouble of feeding their flocks for about *five months* of every year. This is almost as bad as in New England, where it is the great bane of profit, and the most serious obstacle to success in that pursuit. I have long fancied that there must be, somewhere within the United States, a region, where, while it is cool enough in summer to be a *grass-growing* country, the *winters* are so *short* and *mild*, that sheep would not require much if any feeding, at all events not for any great length of time. If there is such a region, that is the country for *sheep*, and *there* is the place where *wool* can be grown *at least cost*, especially if land is cheap. If the country is hilly or mountainous, so much the better; or if dry, sandy or rocky, none the worse. Only, not let it be sunken and wet land, for such will not answer for sheep pasturage, though it may do better for horned cattle than for sheep.

Where is such a country as I have described? I ask for information, and hope to receive it ere long through your columns. Will not some of your readers at the south and southwest inform us? In so doing they might be also "doing their country some service." We know that fine wooled sheep will thrive and do well in the southern parts of Pennsylvania and Ohio, and in the hilly and mountainous parts of Maryland and Virginia, and also in Kentucky and Tennessee, and in the upper parts of the Carolinas and Georgia. In the upper part of the *latter* state, which is a grass-growing country, though perhaps at present almost too new, I should not be surprised if the "Eldorado" of *wool* as well as of *gold*, the "Elysian Fields" of sheep, should ultimately be found. The "prairie country" of the west, will, for a time, have one very important advantage, which is, that land is not only cheap, but they do not have to incur the expense of *clearing* it, which, in some heavily-timbered districts of country is a great tax. There is one view of the subject of sheep-farming, which is consolatory and encouraging to the wool-growers of the older states. It is, that where the climate compels them to feed their sheep through a long winter, they save by that means the manure, no trifling consideration, as, if well husbanded and applied, their next season's crops will testify; and, in addition, the manure so saved will be far more valuable in the old states, where it is needed, and where the *crops* it produces will *always* be worth the most money.

But I have already consumed as much of your space as is allowable for one time, and I must consequently defer to another opportunity, the promised discussion as to the *best and most profitable* kind of sheep, which topic will of itself furnish abundance of interesting matter for my next epistle. Till then adieu.

AMERICUS.

March, 1843.

For the American Agriculturist.

CITY MANURES.

In my two former articles, I gave our farmers an account of eight fertilizing materials thrown away in the cities of New-York and Brooklyn. I shall now proceed to point out others equally valuable to the agriculturist; and shall first bring to their notice, the broken glass of our cities, heretofore carted away to fill up our docks.

Glass is a silicate of potash or soda, which enters into the composition of all grasses, straw, grain, and corn, forming a fraction of the solid portion of probably all vegetation. Silicate of potash and of soda, is silicious sand chemically combined with those alkalies; that is, such sand as is commonly found on our sea beach. Wheat contains

a larger portion of silicate than any other grain; and if sown on land totally exhausted of this material, no wheat will be produced, however rich the soil may be in other fertilizers. When sown on land mostly exhausted of silicate, the crop will be small and the grain light in weight.

To apply glass to land, it should be ground as fine as flour. I have sold about twenty-five barrels of it to our farmers within the last six months, and the coming crops will test its value. The price charged has been $1 75 per barrel, the barrel included; and when our farmers know that each barrel contains more than three hundred pounds, and that in this quantity there are from one hundred and five, to one hundred and twenty pounds of potash or soda, they will know it to be one of the cheapest fertilizers they can purchase, independent of any effect from the silex dissolved in it. It is purchasing pure potash or soda at less than one and three quarters cents per pound. I should consider one barrel per acre to be an ample supply for two years' crops.

Many hundreds of tons of broken glass are thrown away in New-York and Brooklyn annually; and as every hundred tons contain from thirty-five to forty tons of alkali, our Long Island and Jersey farmers may judge how much they lose by not employing it on their land.

I shall now call your attention to the Plaster of Paris thrown away in New-York. Such an assertion will no doubt surprise many a farmer who uses plaster; yet it is true that scores of tons of the purest of plaster have been annually thrown away in our city. I last summer had carted away twenty-one barrels of it to put into a compost heap at Gravesend. In making soda water they use carbonate of lime, from which they separate the carbonic gas to saturate the water contained in their fountains. To do this, they have to use sulphuric acid; this combines with the lime, separating it from, and liberating its carbonic gas, and the residuum thrown away is the purest of plaster. Such plaster will be moist, yet sufficiently solid to cart away in flour barrels. Let those farmers who find plaster beneficial to their land, attend to this source of supply.

I shall now call your attention to the dock-mud taken out of our docks by dredging machines. I was quite astonished the other day to learn that this material was landed in scows, then warped to the tide current, and *there thrown into the river!* This is probably one of the most valuable fertilizers we have in the country, and the quantity is immense. It contains the whole wash of the city; and after a rain-storm, the most valuable portion of our street dirt settles in the docks. Chamberlie, soap-suds, soap-lees, fish-offal, blood, pot-liquor, &c., &c., are the greater portion of them collected in the dock-mud. The very smell from the docks when foul, or the tide is low, is a pungent proof of its fertilizing power.

This material should be collected in some convenient spot where it can be landed, put into heaps under open sheds, mixed with lime, plaster, or charcoal, and let lie until a thorough decomposition takes place, and then applied to the land. There can be no doubt that one cart load from such a compost heap, would be more valuable to the farmer than three loads of the best street dirt.

It has been objected by some that dock-mud contains salt. This, instead of being an objection, will be found to be one of its most valuable properties. The celebrated guano-manure, taken to Europe from islands in the Pacific ocean, and selling there at $2 33 per 112lbs., contains more than thirty per cent. of sea salt, a larger portion probably than would be found in our dock-mud. I should consider that a compost made from our dock-mud would be very little, if any, inferior to the guana-manure.

WM. PARTRIDGE.

PROTECTION TO WOOL.

As the subject of the necessity of further protection on wool, is at present occupying the attention of the public mind, in particular accordance with the advice of some of our friends in town, we give extracts from two letters received three months since, and have spent some time in again investigating the wool business here. It will be seen, that we can add but little to what we said in our January Number. But here is the substance of the whole matter, so far as we can learn.

1st. None but the very coarsest wools, such as we do not grow now in this country, can be imported at present prices without a loss.

2d. No wool can be brought here from abroad, that would have the smallest chance of competition with Mr. Grove's, Saxons, for example, or Mr. Collins's, Rambouillets.

3d. The fine Australia merino, which it was feared would be so great a competitor to our own merino, can not be afforded here at less than 45 to 50 cents per pound, and it is bringing more than that now in England; and it will consequently all go there hereafter.

4th. The fine Mateza wool of South America makes good satinets, and is about equal to our half-blood merino, and will therefore compete with it in being manufactured into this article; but in consequence of having so many burs, it can not be stapled, and enter into competition with our middle wools and the manufacture of broadcloths and cassimeres. It is sold from 6 to 12 cents per pound, in this city, according to quality, and the amount of dirt and burs in it. Yet notwithstanding this low price, when it comes to be made as clean as well-washed half-blood merino, it loses so much, that it will cost the purchaser at least 26 cents per pound, and is therefore only a fair competitor in our market.

Now under these circumstances, we think our

wool-growers should be satisfied with present protection, and bend their exertions to *improve* their flocks, and to the production of a better quality of wool; if they will do this, they can undersell any foreign importation, and be doing a good business. We have as fine a country as there is on earth for growing wool; and it will be our own fault entirely, if we are driven from the home market, or indeed if we ever allow a successful competition with the foreigner.

Cleveland, Ohio, Dec., 1842.

Mr. A. B. Allen: When the Tariff Bill was passed in August last, many of our farmers exulted, and said that they should be able now to add one more article to the number of their products that they could turn off for cash, viz., wool. But a few of the more intelligent and reading ones begin to suspect all is not right; that the wool-grower is *not protected*, but the *woollen manufacturer*.

It is becoming a matter of serious discussion among the farmers in this quarter, whether under the present Tariff, wool can be successfully grown. It certainly seems to us, from some communications which appear in the eastern papers, that it can not be safe for western farmers to invest in sheep, and make wool a staple of their farms, under the existing duties on wool; and I refer you to the enclosed No. of the N. Y. Evening Post on the subject. If the wools imported are of the character represented, and cost less than 8 cents, paying consequently no duty, why we shall find the enterprising Yankees in South America, with their vast flocks of Saxony and Merinoes (climate, pasturage, and labor, all being extremely favorable to the growth of wool there), as we already find them in the West Indies growing silk.

I have lately been inquired of by several large farmers, whether these statements are true? Being unable to give any answer, I have concluded to ask you to take the subject up, and give to the public all the information in relation to it, that the subject will admit of; for it is certain that the truth ought to be widely disseminated among our farmers. Situated as you are at the head of American commerce, you can collect, through the importers and manufacturers, all the facts as to cost, freight, expenses of cleaning, and the different qualities of the imported wools, and the kind of cloths manufactured from them. If my memory is correct, you and your friends have heretofore been engaged in the importing of wools from South America and Russia.

C. M. Gidings.

Dear Sir: In speaking of sheep here on the western prairies, you say: "I think a great deal of that business; and my opinion is, that fine Merino wool may be grown there [meaning on the prairies of the west] for 20 cents a pound, at a fair profit; and if it can, it will soon be hardly second to cotton in our national products, and we shall become large exporters, instead of importing as we now do." Yes we do, much to our shame as a nation, —we do import wool, and more to the shame of the framers of the late tariff, that no protection is afforded to the wool-growers, until they get so into the business, that they will neither need nor ask protection. A shame it is that we import wool, while we have millions of acres of the finest sheep pasture in the known world, annually giving their rich foliage to feed the prairie fires, instead of fattening millions of sheep.

Well, sir, *wool can be raised at a fair profit at 20 cents* a pound, delivered in New-York, or Boston. But at present, the west is not able to go ahead; for the sheep are not here, and the capital is not here. We want eastern capital and eastern sheep. Just give us the necessary material, and I pledge my reputation that wool can be grown in untold quantities upon the western prairies, at 20 cents a pound; and with this price, the sheep-owners will grow rich faster than at any other agricultural pursuit in the Union.

And it does not require a long preparation before the business can be begun. The land is now ready, both pasturage and mowing; and I say to eastern men, come to the West with your sheep. You can not raise wool upon your high-priced land at 20 cents a pound, for fine qualities; but we can. There is another disposition that may be made of the surplus sheep of the eastern states. Thousands of them might now be let to responsible men to double in three years; or for such a portion of the annual crop of wool, as would amount to a great interest on the value of the sheep.

Only let us have the sheep on the prairies, and I assure you that the west will soon show the world another wonder, that will send somebody's "wits a woolgathering."

An Illinois Farmer.

A. B. Allen, Esq.

From a letter recently received from Judge Beatty of Kentucky, we extract the following:

I planted my hemp-seed last season somewhat closer than recommended in my essay, to wit, 4 feet each way, and left *three* stalks in a hill, cutting out all the blossom-hemp within a week after it began to appear. The blossom-hemp, which *afterward* bloomed, furnished sufficient pollen to impregnate the female plants. These male plants were suffered to stand till they had pretty well shed their pollen, and were then cut out. There were now left in each hill, from one to two stalks of seed-hemp, averaging about one and a half. The yield was about 40 bushels to the acre. The season quite a favorable one.

I have not any information respecting the rotting of hemp by steam, that would be useful to you. The effort made at Newport has proved a failure, but whether from the plan being intrinsically defective, or for other causes, I can not say; I incline to think, however, that this plan will be no improvement upon the old method.

CHEAP BEEF AND TALLOW AGAIN.

We received a letter from Mr. Robinson, of Lake Court House, Indiana, in reply to our com-

ments in February number, upon the production of cheap beef and tallow at the west, which has unfortunately got mislaid; and lest it may not turn up again, we make haste to state the gist of it, which we think we can pretty fairly do, from memory. It was not the great weight of the cow of which Mr. Robinson thought so much, but the large quantity of tallow which she produced for her carcase; and being pure grass-fed, and that upon land, which, as it is owned by Government, any one can have the free use of—the beef and tallow would consequently cost a mere nominal price, and thus give him the advantage of the argument in point of cheapness, to which, of course, we readily accede.

From a private letter from Mr. Robinson of 8th of March, we extract one paragraph.

Your description of the English mode of stacking grain, I have never before seen in an American paper. We are too unwilling to copy good methods of farming, because they are English. If this plan of stacking was universally adopted in this country, it would save great expense in barn building, and tens of thousands of bushels of grain every year.

For the American Agriculturist.

CULTIVATION OF FRUIT TREES.

When the large profits attending the cultivation of the finer fruits in the neighborhood of a market, and the great addition to the food, comfort, and luxury, they afford everywhere is considered, it is a matter of surprise they are not objects of universal attention. I have had cognizance of the New-York markets for the last 15 years, and during this time they have borne the highest remunerating prices, yielding a far greater return to the farmer than any other crops he can raise. Early strawberries, early apples, and choice varieties of apricots, cherries, peaches, pears, plums, and grapes, have returned, it is believed, fourfold the profit of ordinary farm or horticultural products. Even during the last season, while good mess pork was selling here for $7 to $8 a barrel, the best peaches, plums, and pears, brought twice that amount, and frequently more! The Bergamot, Bon-Chretien, Seckel, Virgalieu, and other choice pears being frequently worth $6 a bushel, while choice peaches would readily bring $5, and other kinds of rare fruits were equally high. Now in this calculating and all-absorbing money age, what prevents the supply of larger amounts of these delicious products? We can conceive but of two or three reasons which appear to us to cover the whole ground.

1st. The object is too remote; it requires from 3 to 6 or 8 years to obtain a full return for the time and money expended. True, but if your land is for sale any time previous, it will bring several times the additional cost of this outlay, more than it would otherwise do, and when once it begins to pay, it will be a continued source of profit, with comparatively trifling expense thereafter.

2d. The fruit does not thrive as certainly and rapidly as expected, owing to bad trees, or bad soil, or bad management, and the owner is discouraged from further attempts; or the trees become diseased, and he is too ignorant or shiftless to ascertain the cause and apply the remedy.

3d. He does not make it his business, and considering it but of secondary consequence, his trees are neglected, and soon fall into decay. But we have already stated sufficient inducements for him to make it his business, and justify any one who is near a good market in producing the best qualities of fruits in abundance, and when not able to sell at large prices, the farmer cannot procure food, medicine, or luxuries cheaper, and good fruit is cash, than by cultivating an adequate supply for the wants of his own family. I shall confine myself in what I have to say at this time, to a few simple directions as to the choice of soil, mode of treatment, and remedies for diseases.

The soil should be sufficiently dry and in good condition. It is a mistaken idea that very light or sandy soil is requisite to produce good fruits. A strong calcareous clay soil will yield as abundantly, and perhaps a higher flavored fruit than a lighter soil. But any land in condition to yield the greatest quantity of good wheat, may be safely taken as of standard quality for the different varieties of fruits.

The aspect of the land, if there be an opportunity for selection, should be northward or westward, so as to avoid the injurious effect of premature development of vegetation in the spring, by which the fruit is effectually cut off by late frosts.

The transplanting should be managed with great care. If a strong clay soil is used, the ground should first be turned over by a heavy plough, with a double furrow occupying the line of the rows, by which not only is the ground raised higher and an opportunity afforded for the water to pass off in the plough drain between the two lands, but there is more soil thrown just where the trees require it for their own support. When not convenient to do this, and the land is not underdrained, I have found it most effectual for the rapid growth of the tree, to place the root on the upturned surface of the ground, by which they are free from the drowning effects of standing water in the spring, or excessive rains in any other portion of the year.

The distance at which the trees should stand apart, must depend not only on the species of tree, an apple requiring at least four times the space of a peach, and sometimes much more, but also on the variety, twice as much room being necessary for the Baldwin or Seeknofurther, which is adequate to the full development of the Siberian crab. The holes dug to receive the roots should not be less than 4 feet square, whether the roots are half this size or less; the object being to prepare a rich mellow bed for them to develop in. The earth should be carefully trod around them when put in, and water added to settle the fine earth around the roots, will do much toward pre-

venting them from dying. Strong manure is not suited to the young tree. Muck from swamps or the woods, chip manure, or a mild, well-tempered compost, is proper to commence with, and ashes and lime may be added afterward as the tree matures. Great care should be used in selecting such as are healthy and of rapid growth, and they should never be subjected, from the want of proper care, to become stunted or diseased. By careful attention, a growth and maturity may be secured for them in 5 or 6 years, they would not otherwise acquire in 10, or perhaps never.

BLACK BUNCH IN PLUM TREES.—(FIG. 5.)

To illustrate the text of our correspondent in what follows on the diseases of fruit trees, we give above a cut of a diseased branch of a plum tree, frequently called the "*black bunch*," but which we understand him as defining, "the *knots or black warts*." We are indebted to the courtesy of Messrs. Nafis and Cornish 278 Pearl St., publishers of PRIME FACTS FOR THE FARMER, for the figure, a little work we highly commend to our readers.

Diseases.—The *fire-blight* in the pear, is probably owing to an insect, and the proper remedy is excision of the limb; *cut off and trim it as fast as it appears.* The same remedy applies to the *knots* or *black warts* in plums, and the *black gum* in cherries, they being caused by the boring of an insect, and nothing but burning affords any safety to the progress of the disease. If one or more trees or even a whole orchard is deeply affected, cut it down, and set out another on a different field. The *curculio* is propagated by the deposite of the egg in the unripe fruit, which, in consequence, falls prematurely from the tree. Swine at large under the tree, will destroy the future enemy by eating the fruit. If the situation of the trees permits their access, the premature fruit as it falls should be carefully collected and fed to them, cooking first when practicable.

Much injury is done to fruit trees by trimming at a wrong season of the year; but those desirous of information on this subject, will find it in the 3d No. of Vol. I. of the American Agriculturist.

The peach is subject to two injuries, the *borer* and *the yellows.* The first, ægeria exitiosa, lays its eggs in the body of the tree at the surface of the ground. They eat the bark, and in time destroy the tree. They are indicated by gum oozing from the wound, just underneath the ground. To destroy them, the earth must be removed from around the trunk 3 or 4 inches deep in the spring,

and dig out and exterminate every insect from the body of the tree. *The yellows* is indicated by a yellowish color in the leaves of the trees, dwindled shoots, with stinted leaves and premature fruits of a miserable appearance and quality. This disease is slowly propagated by contagion; and as there is no cure for one thoroughly infected, the only safety is to exterminate any diseased tree as soon as discovered. The life and product of the peach is augmented by trimming off the outer branches of the tree, one to two feet, in July. This practice keeps the tree healthy, and the limbs full of bearing buds.

What are the causes of failure in fruit trees at the present day.—I recollect orchards, some 25 years since, which had been planted 30 years before, on the virgin mountain land of New-England, that bore as great a variety of large, fine-flavored fruit as I ever saw. I visited the same farm a year or two since, and found all the choice varieties either entirely gone, or so far past their vigor, as to yield but moderate supplies of diseased fruit. Other trees which had been set out to take the place of such as had died, were of small growth, and produced indifferent fruit. What were the causes of this difference? I conceive them to be mainly two: 1st, disease and enemies unexterminated; and 2d, the absence of some principle of fertility, originally in the soil, but now exhausted. Close observation will detect the former, and apply the remedy; scientific research will ascertain the latter, and prescribe the addition required. Like the deficiencies for wheat where it was once yielded in great abundance, we believe fruits may most effectually be produced by adding ashes and lime to a soil already in good heart. A moderate quantum of observation, intelligence, industry, and good sense, will enable any farmer to supply himself in abundance with these essential accompaniments of every good farm. R. L. A.

Buffalo, March, 1843.

From a letter of Thomas Affleck, Esq., dated Ingleside, Miss., 15 Feb., 1843, we make some extracts. The specimens of lime and marl have not yet come to hand; but as soon as received, we shall see them properly analyzed.

Cotton Seed for Cows.—I am now feeding to my cows, boiled cotton seed, with a little chopped corn added. It gives the butter a rich flavor and fine yellow color, and I may safely say, doubles the quantity. The cotton seed must be *well-cooked* though, which a few minutes boiling will do.

Value of grade Durhams.—I could show you about as pretty a herd of cows as you would desire to look at, that I found here on one of our places. They were the produce of the common Spanish cows of the country, by a $\frac{7}{8}$ or $\frac{15}{16}$ Durham bull, which was brought there some years ago, and lived only a few months, leaving these animals. They are all good milkers, giving now an average of 8 quarts a day, and suckling their calves. They are compact, well-made, handsome animals; large for their height, and heavy; and all either red and white, or a sort of brick-colored brindle. This year they are bred to Coronet; and I shall show some of them at our April fair, as proofs of what a *single* dip of Durham blood will do, although not quite a full dip.

Cultivation of the Turnep.—These are usually sowed here in August and September, on ground enriched by penning the cows and other stock upon it some time previously, or what is still better, on a piece of newly cleared land. But I prefer to them, for cows, *raw* sweet potatoes and cooked cotton seed.

Lime and Marl.—At the Cold-Spring plantation, I have found a thick stratum of limestone, with a 20-inch layer of rich marl over it, and think it better than a silver mine. I shall apply a good coat of marl to a few acres of this land, that I am putting in oats this spring; and as soon as I can prepare it, I will have a kiln for burning lime. I send you specimens of this lime and marl. Will you do me the favor to give me an analysis? No. 1 seems to contain the greatest portion of carbonate of lime. No. 2 is a part of a stratum running beneath the lime, and is I know not what. No. 3 is marl, and if I am not greatly mistaken, is a rich specimen.

For the American Agriculturist.

A MARYLAND FARM.

Agricultural Capital.—I have frequently, in reading over the foreign agricultural journals, been astonished at the lavish expenditure of capital on the landed estates in England, to promote their fertility, reclaim them from waste, or bring hitherto worthless tracts under cultivation, wall them in from the sea, and otherwise render them more productive; but on further examination my wonder has ceased, when I learn that in almost all cases of such improvement, the capital thus expended has produced a liberal additional interest on its investment. Probably no department of British industry receives so liberal an outlay of capital as that of its agriculture, affording in this particular a marked contrast to our American agriculture, which scarcely anywhere receives, and even then grudgingly, but an investment of moneyed capital sufficient to render our lands habitable, by a large proprietor. How often do we see proprietors with large landed estates lying in a ruinous, dilapidated condition, with but a few meager acres carelessly cultivated, around their dwellings, which last appendage may be even elegant and costly, while they have their tens of thousands invested in some bank, or insurance company, or in bonds and mortgages, which, if withdrawn, and intelligently invested in the improvement of their estates; what noble revenues, as well as delightful employments would result from it, instead, as is often the case, of wasted fortunes from the insolvency of their debtors, and of personal ruin to many a worthy and, under different circumstances, promising young man, resulting from idleness and dissipation, arising simply from want of employment!

Yet, with all our experience in these matters, hardly an individual can, at this time, make an

investment of capital in agriculture, but, ten to one, he will be looked at with suspicion by his monied friends and associates, and either his judgment or his credit, according to his expenditure, is at once suspected. This we know to be all wrong, and the result of a perverted and false estimate of the true value of agriculture, and its safety, and sure reliance for support, in all times and seasons, and the steady virtue and integrity of those who rely upon its bounties. How many, and many young men have I known, sons of rich pains-taking fathers, who, indulged in habits of ease or of loose attention to business while boys, yet with sanguine expectations hereafter, on attaining their majority had been placed in business with a handsome capital, and in two, three, or five years, as the case may be, had lost every farthing, and thousands besides, the property of others who had confidingly trusted to their good management! Yet if these fond fathers had invested the same sums in good farms or plantations, and given their sons a plain agricultural education, ten to one they would have proved prudent, useful, thriving citizens, and good, contented, and happy farmers, instead of, at an early age, broken down, disappointed, and unhappy men. And all this from a false, imperfect estimate of the agricultural profession, and its dignified and sturdy resources.

A Maryland Farm.—But to the main subject of my letter, instead of a homily on false principles and habits. In a brief journey to the seat of Government, last June, when arrived at Baltimore, I made a diversion from my route, to visit a gentleman located near the Ohio railroad, about thirty miles west of the city, and to view his fine estate, and see his herd of beautiful Devon cattle, for the care of which he has long been celebrated. I found him on his farm of some seventeen or eighteen hundred acres of fine rolling land, a garden amidst a poorly cultivated yet pleasant country, years ago worn down by hard cropping of corn, wheat, and tobacco, but of good natural soil and capabilities. Here, retired upon his estate, with a plain yet beautifully-situated dwelling and outbuildings, and all the necessary appliances for a gentleman of wealth, education, and leisure, he has for many years lived and improved his estate, until it has become one of the most valuable in the country; and from a condition which, when he first began its cultivation, was sterile, worn out, and almost worthless. I spent a day in rambling with him over his fine domain, and never have I been more pleased and instructed. As this is a full and successful illustration of what may be done in almost all our Atlantic states, in the improvement of worn-down soils, I trust I shall be excused for giving it somewhat in detail. When the proprietor first located on his farm it was entirely unproductive; yielding no crops, giving no manures, and possessing no resources of fertility, other than the muck or swamp-holes, occasionally interspersed among the woods and waste lands of the estate. After thoroughly examining the soil, which was found to be of various kinds, but chiefly a loose friable earth, based on a clay bottom, with occasional tracts of stiff clay on the surface, he purchased a limestone quarry a dozen miles distance on the railroad, erected two large kilns at the depot near his estate, and went vigorously to work in getting out the stone, reading it to his kilns, and burning it. This material, delivered on the farm, costs on an average twenty cents a bushel. The bushes and straggling woods were cut and made into fuel, the fields were squared out and put into shape, and the quick lime applied at once upon the land, in quantities of from fifty to two hundred bushels to the acre, no matter at what season of the year. When the lime was ready it was applied, by dropping it in heaps of five or six bushels each, and, as soon as sufficiently slaked by the weather, carefully spread on the soil. A great part of the land was so sterile that it had no sod upon it, and was sadly disfigured with gulleys made by the washing of the rains. In such fields as had a tolerable sod of grass, a slight dressing of barn or stable manure was obtained and applied with the lime, which being ploughed became at once productive; but where no manure was placed in aid of the lime, it was left untouched to dissolve with the rains and snow, and incorporate as best it might with the soil. Under this latter process the soil became gradually grassed over, and in two to four years, a fine coat of native blue grass (*pou pratensis*), and white clover (*trifolium repens*), affording beautiful succulent pasture, covered the ground. When this grass coating is accomplished, the land is in proper condition for cropping, and, with a thorough ploughing, yields abundantly of all the grains and grasses grown in this climate. Where there is no vegetable matter in the soil for the lime to act upon, I conceive the lime must have drawn most of the fertilizing matter from the air, condensing the ammonia therein contained, which is brought to it by the snows and rains. Of course all that is thus procured, is so much added to one's wealth by a very moderate outlay. It also seems to predispose the materials of the soil to form those associations and tendencies, which enable it to produce vegetation when in no condition to do so before.

In ranging over the estate, we examined particularly the land, from fields limed years ago, and in the fulness of their production, to those yet white with its recent application, and just looking green with the fresh verdure of the young grass. One field contained fifty acres of the most beautiful wheat I ever saw, promising to yield full forty bushels to the acre. Another, of seventy acres, was newly planted in Indian corn, and had a fine chocolate-colored soil; which had produced its sixty and seventy bushels per acre. The oat fields looked rank and fresh, and the grass lots for hay were, many of them, thus early, lodging with the over-growth of their burdens. Such timothy and clover, and such orchard-grass meadows, are rare in that region. In short, by the application of lime in this manner, or without the aid of stable manures, all the cultivated lands were teeming with fertility and abundance. Hundreds of acres thus limed for years, now in beautiful pastures, had been untouched by the plough, and were grazed by herds of cattle,

sheep, and horses, rioting in its luxuriance. Eleven hundred acres had thus been limed, and new fields were waiting for this fertilizing stimulant, still in the process of application. I saw large tracts of land so sterile that no vegetation grew upon it, not even grass or weeds, separated only by a fence from those bearing the richest herbage. One had been limed—the other not.

I had never seen a specimen of agricultural improvement which had pleased or interested me more than this; and when, in addition to this teeming abundance, all the appliances of rural luxury and independence, buildings, orchards, groves, and delightful scenery, were added, the picture was full to admiration. Yet all this beauty, fertility, and abundance, was created by the simple application of scientific principles, with the aid of moneyed capital, to this body of otherwise inert and lifeless soil. The proprietor told me that his friends and neighbors had jeered, ridiculed, and blamed him for thus squandering, as they termed it, his money on such worthless experiments; but the result has equalled his warmest anticipations, and he has now the solid pleasure of looking at an estate, which, when he took possession of it, was absolutely worthless in its income, and not saleable at five dollars the acre, now worth eighty or a hundred. In addition to this improvement of the soil, ten or a dozen miles of durable and substantial post-and-rail fences of chestnut and cedar have been built, separating the farm into large and convenient fields, with commodious lanes and entrances leading from the mansion-house and farm-buildings. Ample hay and grain barns are erected in many of the enclosures, for securing the crops and feeding the stock; and altogether this may be termed a *pattern farm* of the highest order.

The question may naturally enough here be asked, how should this remarkable improvement occur in this country, and by one who was not bred a practical farmer? The answer is a simple and easy one: by the application of right principles to agricultural improvement. This gentleman possessed education, enlarged and intelligent views of agricultural improvement, had travelled extensively abroad, and profited by his foreign observations; and after returning to his native state, instead of slothfully sitting down in idleness and inglorious ease, at once applied himself to the improvement of his property, and in giving an example to his fellow-citizens of incalculable value. And yet millions of acres in that fine region, now yielding little or no income, might, by a very moderate outlay of capital, be made equally productive. But more of this hereafter.

Devon Cattle.—By far the best and most perfect herd of Devons I ever saw is kept on this estate. The originals of these fine animals were imported about the year 1819, as a present from the late Earl of Leicester, then Mr. Coke, of Holkam, England, to Messrs. Patterson and Caton, two distinguished gentlemen of Baltimore. Not being practical agriculturists, these choice animals met with indifferent treatment in their breeding, and for many years were neglected among the stock of their farms. But falling some years ago into the hands of their present proprietor, who readily saw their value for the locality and soil of his estate, he imported from Mr. Bloomfield (a principal tenant of Lord Leicester, and indeed the *real* breeder of the fine Devon stock, for which his Norfolk estate has become so celebrated) a most valuable bull, by which his stock was in a few years brought up to a standard, excelled probably by few herds of Devon cattle in England, and certainly by none in this country. A year and a half ago he made another importation of a two-year-old bull, certainly the most perfect of his kind, in symmetry and good points, that I ever saw. To a size abundantly large for all purposes of Devon stock, he united a fineness of touch, a delicacy of limb, and a vigor of constitution, such as I had not before imagined could belong to this ancient family of stock. In truth such a Devon I never saw! His color a deep mahogany, with the beautiful rich yellow ring round the eye, and the elegant slender white horn! All my prejudices against the Devons as being "pretty *little* cattle enough," were dissipated, and I at once acknowledged their value for the lighter soils of our country. In the pasture with this young bull were eighteen or twenty thorough-bred cows, large and beautiful; all a deep mahogany color, and hardly to be distinguished from each other, so much in shape were they alike. Their udders were large, with fine silky handling and genteel upper teats; and indicating by appearance good milking qualities. This their proprietor assured me they possessed in fully an equal degree to the common cows of our country, and probably superior. In another field were a score or two of thrifty young steers and heifers, the produce of the cows, and near by a home lot with a number of young calves of the present year.

I need hardly say, after thus expressing my admiration, that, before I left, I purchased three or four select young animals of this valuable herd, from which, with those I before possessed, will, I trust, in a few years, give me a herd of Devons equal to any other to be found. For general cattle purposes I advocate the Short-horns. They are, all in all, the finest cattle. But there is a very general and, in my opinion, obstinate prejudice in our country, particularly among the northern people and their descendants, for *red* cattle, especially *red* oxen; and your true New England men, when they work oxen altogether, would as soon be seen driving a mule and a goat together, as a pair of roan or spotted cattle. No—*red* is the color, and *red* they will have, and *red* they *shall* have, if I can aid them to it; and no other breed gives it in such deep, rich, unalloyed luxury as the Devons. This breed has sufficient size for working cattle, and in beauty of form is perfect.

Here too I discovered several specimens of beautiful South Down sheep, from the select imported flock of Mr. Rotch, of Otsego. Some fine blood mares and colts, to which has been added one of my own thorough-bred mares of the Barefoot stock, now in foal to Bellfounder. Even the barn-door fowls of the place were of choice and selected stock, being a cross of the large Bucks

county fowl of Pennsylvania and the game breed; and they now rejoice in the acquisition of some nice young Dorkings.

But I weary your patience. To say that I was charmed, delighted, and exceedingly instructed, by my visit to this luxurious retreat, and much indebted to the refined hospitality of my esteemed host, would be barely common place. A proper delicacy forbids my saying more, and I would hardly have gone so much into detail, but for the rare and profitable example of highly improved agriculture here presented.

L. F. ALLEN.

Black Rock, 1843.

For the American Agriculturist.

NECESSITY OF WARMTH AND SHELTER, IN WINTER FOR STOCK.

Llangollen, Ky., Feb. 4th, 1843.

DEAR SIR:—It is frequently asked by young farmers, to what kinds of domestic animals and stock is it advantageous to afford warm and comfortable winter quarters? The answer is—*to all;* from hens and chickens, to the horse and ox. There is great economy of food in affording shelter to all that breathe, in a cold climate, and to all animals that we wish to fatten, perfect quietude, or freedom from muscular exertion, is not less important.

All the food given to animals, goes to supply the waste in the system produced by the vital functions and muscular exertion, keeping the system in *statu quo*, or in increasing its bulk and weight, by addition, in full-grown animals, in fat, or in keeping up a supply of heat to the body. In cold weather a very large portion of the food is expended in generating heat, and just so much is lost to the production of fat, milk, eggs, &c. The necessity for generating animal heat from the carbon and hydrogen of the food, increases with the severity of the weather, for the faster the heat is abstracted from the body by the atmosphere, the faster must it be supplied. We know of no other source of animal heat than the oxydation of the elements of food by breathing, and their passing out of the body in the form of vapor, of water, and carbonic gas. All the food, then, that is thus burnt to keep up the heat of the body, is lost to nutrition. Artificial warmth, then, either from shelter or clothing, supplies the place of food—of that food thus expended to produce necessary heat, which would go, if that were supplied from other sources, to the formation of fat, or the supply of waste. All muscular exertion, everything that increases the frequency of breathing, causes waste, which must be supplied before any increase in fat, or milk, or muscle, can take place. Hard work, active exertion, and quick breathing, cause rapid *waste* of the parts of the system. This must be supplied by food before there can be any addition. Without this waste, the same food would go to *increase* the weight and bulk of the body. When animals are kept warm, clean, and quiet, about one half the nutritious matter (if it be diffused through a bulk sufficient for proper distention of the organs of nutrition) that is necessary to a wretched shivering existence, exposed to the inclemencies of the weather, will keep them in fine condition. And good shelters and warm clothing even, cost much less in the course of a few years, than large daily supplies of food, necessary to vital warmth, and expended and lost in producing it.

Independently of the question of economy of food, there is great comfort to a humane man in seeing all living things around him comfortable; and especially those to whom he is largely indebted for those comforts which he enjoys. Even when there are ample supplies of food to waste in keeping animals warm, still they suffer in very cold weather, if unprotected from cold winds, sleet, and snow. And it is painful to see them drawn up and shivering, turning their mute supplicating countenances to their masters, for protection from the pitiless inclemency of the weather.

The subject of these brief hints is so ably treated, and fully demonstrated in Liebig's Animal Chemistry, that it is greatly to be desired that his work should be in the hands of not the few scientific men, but of the people; and I should be greatly pleased to see an edition of it, in which the language in which so much important truth is embodied, should be adapted to popular comprehension. Many persons will not read it, and others will not understand it, in its present translation. His facts and the unavoidable inductions from them, bring us to a new era in physiology. Starting points that have not been approached before, seemed to have been reached, and a new direction will be given to our researches, and a more profitable one, for we shall seek attainable objects. We are yet barely in the dawn of the application of the inductive philosophy, and centuries will pass before mankind will be fully aware of the obligations they owe to Lord Bacon.

Very truly your friend and
Obedient servant,
JOHN LEWIS.

A. B. ALLEN, Esq., *New York.*

For the American Agriculturist.

IMPROVEMENT OF FARMS.

PLANTS as well as animals require food, which they obtain from the atmosphere and the soil. When land is naturally barren, or is impoverished by severe cropping, it can only be improved by good tilling and manure. In looking over our farming districts, we find as a general rule, that farmers do not appreciate the value of manure; but few take the trouble of informing themselves of its true nature, and upon what its peculiar effects upon the growth of plants depend.

Manure is made up of certain gases, a few chemical salts, and some other less important substances, which, when placed under favorable circumstances undergo certain changes, which fit them to afford what is requisite for the perfection of plants. When the chemical changes in decomposing substances are taking place, gases are formed which are sensible to the smell; upon these the most valuable quality of manure de-

pends; we consequently see the importance of putting manure in a situation where these gases may not be lost, either in a compost heap well covered with substances which have an absorbing power, such as charcoal, common earth, &c., or with something that will by a chemical change give off what would be useless or hurtful to plants, and take up what is beneficial in its place. Plaster of Paris, potash, soda, common salt, &c., act in this way. Sometimes there is contained in the soil in a latent state, as much nourishment as would supply all the plants that could be raised on it for a long time, providing there was employed some chemical agent to liberate it. This accounts for the wonderful effects of lime in some cases.

All animal and vegetable substances contain the elements of plants; nothing therefore on a farm should be lost. If a farmer wishes to add speedily to his productions, he must convert every refuse substance into manure. The more manure he has, the greater will be his crops, and after a farm is once in good order, it is very easy to keep it so. Hundreds of substances are thrown aside and wasted, which would add to the quantity and improve the quality of the manure heap.

Manure is the laborer's friend; it makes the ground more easily tilled, and pays invariably for itself. In other countries they use much manure, for it is the only way they can produce the abundant crops that reward them for their labor. Every farmer should have a compost heap, into which he could put all his manure from his stables, and also deposite all his weeds, ashes, house slops, dead animals, feathers, rags, mortar, shavings, leaves of trees, &c.; and this should be constructed on a side hill if possible, that everything could be thrown in easily from above, and an opening left from top to the bottom on the lower side, so that it could be closed with boards shoved in proper grooves, which could be taken out separately, to facilitate the removal of the compost. Land is always best when it contains a proper proportion of clay, lime, and sand, with a suitable quantity of animal and vegetable manure. When either of these is wanting, it should be added, for it has been found that such additions have produced the most beneficial effects.

Our undivided attention should be paid to the improvement of the land we have under our care. If we employed more thought and reflection in our farming operations, and used the means in our power with more sound judgment, then could we expect to see the best results following our exertions. If farmers would commence a series of experiments on a small scale at first, and when they ascertained what would best answer their purpose, then pursue it, they would soon find how much more valuable and productive they would make their farms. There is no question but that one of our greatest misfortunes is, that we have too much land; we do not value it sufficiently; we do not properly attend to it. There are but very few who have ever put their lands to the test, to show what their powers are. A system of robbery exists over the fairest and most eligible land in our country; and when the land becomes partially exhausted, the husbandman, instead of improving his farm by good cultivation, and the application of a proper kind of manure, concludes to sell out and purchase another farm where land is less expensive and more productive,—a very bad practice, frequently bringing sorrowful disappointment from the severing of family ties and old associations, and also from blasted pecuniary expectations.

Such a spirit is manifested in every part of our country; even in Dutchess, one of the most productive counties in this state, we find that many farmers are becoming dissatisfied with their healthy and favorably-situated farms, and are emigrating to other states, where much uncertainty exists whether the climate will agree with them, or if they will ever receive sufficient returns to satisfy them for the sacrifices they must make. If such farmers would commence improving their lands, beginning on a small scale, they would soon find, that owing to the greater prices obtained for their produce in this market, they could compete with the farmers of any state of the Union, and would remain eligibly situated in a healthy country, having all the benefits of a long-established society of well-bred and intelligent people.

HENRY A. FIELD, M. D.

New-York, March, 1843.

For the American Agriculturist.

SOUTHERN PRODUCTS.

Mississippi City, 18th Feb., 1843.

A. B. ALLEN, Esq.—Our country offers the strongest inducement to manufacturers, particularly of coarse cotton and woollen goods, which would find a large home market. The raw material being made on the spot, and then the article manufactured wanted for consumption; our fine water power, mild and healthy climate—very far surpassing for health any point in the northern states—would induce people skilled in the business to work here for the same wages they do North; and they would greatly prefer it when well acquainted with the facts as they really exist. I know the northern people generally consider the whole South a *graveyard*. The reason this idea is so prevalent is, that heretofore no attention has been given to the *healthy* portions of our country, because there the lands are so poor compared with those where the country is sickly, and we are now but *beginning* to learn the capabilities and value of our poor lands.

Another important branch of business is likely to do much for this section of country. The palmetto root, which almost covers the country near the seashore, is found to contain a large quantity of tannin, whether as much as oak bark I can not say, but from experiment, I *know* it contains plenty to answer all the purposes for carrying on the tanning business successfully. These roots lay almost on the top of the ground, three to ten or twelve starting from one common centre, or top root, and frequently grow ten feet long, and from two and a half to four inches diameter, of a spongy fibrous texture, the leaves springing out of the ex-

treme end, which lengthens the main root as the old leaves fall off. The main root is attached firmly to the ground by small fibrous roots growing out, and directly down from the lower side of the main root.

This root can be dug up and ground cheaper than oak bark, besides the clearing of the land which is an important consideration, as taking up these roots has heretofore been considered the most expensive part of our clearing. All now sell our hides to the northern *patent tanners and shoemakers*, who instead of tanning, *rot* the hides, so as to make them soft, and then glue or paste, instead of sewing the shoes together, and then ship back and sell us what they call *cheap shoes and boots!* I wore out four pairs of these boots last year, and was barefoot above half my time at that. But hereafter we will tan our own hides with our palmetto root, and make our own shoes, one pair of which will outwear three of the patent steam-rotting machines. Thus you see there is a strong inducement for industrious, honest, and enterprising tanners and shoemakers to locate in this poor country, where they will not have to thaw their oil and wax by a fire, before they can put it on the leather and thread in winter; and you may depend upon it, the time is now at hand, when the people of the south will give great preference to articles manufactured in their own climate. This feeling has been brought about by the ignorance and fanaticism of some, and the bad faith of manufacturers; and unless the people of the north put a stop to these evils, they will be compelled to remove south if they wish to manufacture for the people of this country.

Upland Rice.—The upland rice yields a fine crop on our poor sandy ridges, and will not grow on wet lands. It differs very little in appearance from the lowland rice. It is generally planted in drills about eighteen inches apart, about the 1st of April, and worked with both plough and hoe to keep out weeds and grass. After the rice matures it is cut. It grows up from the root, and yields a good crop of hay the same season, and often springs up from the root the next spring. Another method, said by some to be better, is to sow broad cast, and harrow in, then cover the ground two inches thick with old rice straw, which keeps down the grass and weeds, and nourishes the growing crop. The upland rice will yield here about 1,000 pounds of clear rice per acre. Irrigation has nowhere been practised in this country, although it could be done with a trifling expense in many places, and I hope soon to see it fairly tried.

Our population is yet very sparse, and the forest and sea yield us a bountiful support without much work; here we do not feel the necessity of improving our resources. But a spirit of emulation in agricultural matters is manifesting itself, and we may reasonably hope soon to see a happy change here for the better. Seven copies of your paper are now taken in this neighborhood, and about as many more from various other places. A twelvemonth ago, there had never been an agricultural paper of any kind taken or read here. Our country at present is settled with a quiet, happy, and contented people, and a little more industry and intelligence would give us an enviable stand. All we want is a little more stimulus, which a few good, industrious, intelligent farmers emigrating among us would give, if our disease (idleness) did not prove most contagious, and seize on them before their habits of industry would on us.

I have not yet succeeded in getting the herba spagna grass seed from Italy. I yesterday conversed with a gentleman from Italy, who did not know this grass by that name, but thinks it the same as a grass called *sudda* (pronounced *sooda*) in the island of Sicily: he is also of opinion it will succeed well here. I tried last fall what is called bird corn here; I find I can make a large quantity of fodder by cultivating it—say three tons per acre each cutting, and it yields three crops a year. This, with the pea, sweet potato, and pindar vines, with crop grass, which grows very finely, we most rely on at present for hay. I see Dr. M. W. Philips thinks the grass I brought from Cuba, the same as the Bermuda grass of Louisiana: it may be so, but I doubt it, although I think it of the same family. The Dr. I think is mistaken about its having seed; it has a *tassel* with the *appearance* of seed, but I have never been able to grow it from the seed, and have tried it faithfully. It matters not, however, what is its proper name; it has proved a most valuable grass for southern latitudes, and all I desire is that every one may reap as much benefit from it as possible. Many good judges think it superior as a pasture grass to the Bermuda of Louisiana: I am not able to give an opinion on that subject myself.

Cure for the Piles.—Carrying the common buckeye in the pantaloons' pocket, will cure the piles or any other inflammation about the anus. I can not give a reason for it, but it is nevertheless certain—try it.

Cure for the Cataract in the Eye.—The root of the weed commonly called the *devil's shoestring*, soaked in water and used as a wash, will cut the film (called cataract) off the eyes of man or beast, more effectually than the surgeon's knife, without pain, risk, or apprehension.

Very respectfully yours,
JOHN J. McCAUGHAN.

For the American Agriculturist.

INVERSION OF THE WOMB, OR CASTING OF THE WITHERS.

MR. A. B. ALLEN: It is an old saying, that "accidents will happen in the best-regulated families;" and as it is important for every farmer to know how to repair the damages to which he is liable, I send you an account of an accident which occurred in my experience last month, and the remedy which was successfully applied.

One of my Short-horn cows dropped a calf one afternoon during my absence from home, and on the subsequent morning, was found lying in great distress with her withers down (as the term is with us), which I presume is the inversion of the womb, in consequence of the straining of the animal to rid herself of the placenta.

There was enough hanging out to fill a bushel basket, which was put back, and would not remain in its place, but was held by several men alternately until afternoon, when one of my neighbors came over and effectually remedied the matter.

The mode is as follows: The part hanging out must be washed with warm water and soap, and then put back by placing the fist against the centre of the mass, and press it into the vagina in the manner of putting on a stocking that has been turned inside out, as far as the arm will reach. Immediately, before the cow can by straining displace it, pierce with a pocket knife the lips of the vagina, and put through two pins of strong wood, about four inches long, and a quarter of an inch in diameter, so as to divide the opening into three equal parts. These pins must be secured by tying twine across in the manner of the figure 8, lying on the side, which prevents the lips from parting so as to come off the pins, which may be removed in two days.

When I returned home and found my cow in the situation mentioned, I expected to lose her, but she is now alive and well.

Some sew up the part, to prevent the withers coming out after being returned; but the pressure is so great when they get back, as to frequently tear out the skin, which is not liable to be done in the case of the wooden pins, and the latter mode is more simple and easy of execution.

CHARLES STARR, JR.

Mendham, N. J., Feb., 1843.

For the American Agriculturist.

CULTIVATION OF SWEET POTATOES.

Log Hall, Miss., Feb. 10th, 1843.

MR. A. B. ALLEN: I have tried the cultivation of the sugar-beet here for some three years, not extensively I admit, but sufficiently so for an experiment, and have not been able in the three years to pay myself for the trouble. Planting them side by side in garden and field, with the long blood-beet, I see no difference in point of size. I say I have not been paid for my trouble, as it is double the work, if not more, than to raise potatoes, and yet the beet is not, I think, a greater yielder. According to my limited experience, the same labor applied to the cultivation of sweet potatoes, will feed more, stock and do it better: nor is the sweet potato as troublesome to feed, nor yet more so to save. I would therefore advise all who can grow sweet potatoes, even if not above 250 bushels per acre, to do so, in preference to cultivating the beet. I have known 460 measured bushels made per acre, basing my opinion on the affirmation of a friend. The plan I have adopted in saving is pretty much as I now relate, putting up in heaps or a long pile as fancy directs at the time.

If in heaps, strike a circle 6 or 7 feet in diameter, level it off well, then put a layer of corn-stalks some 4 to 6 inches deep, on which place the potatoes as closely together as you can, ever using some care in placing them; then cover with corn-stalks some 6 inches thick, over which place boards if convenient; then cover up with earth some 6 to 10 inches deep, taking the earth from a ditch around the heap. After a few days, open a hole on the top to the potatoes, so as to give vent to the warm air, closing with straw when cool, and cover the hole with boards so as to exclude rain. I never dry them or select particular weather, though preferring dry weather for the operation, as more work can be done and the roots be put up in better order. If they should be wet when put up they will not injure; even pouring water on them in the heap has been practised by an old gentleman I know in South Carolina. I dig as soon after the vines are killed as will suit other work—never before. I have put up heaps containing 50, 60, 100, and 150 bushels; but where I put up many together, I make rows of them by levelling a bed, say 8 feet wide, and 15 to 20 or more long, drive stout stakes along the centre, say every 8 to 10 feet, fasten on a ridge pole, pile my potatoes up to it, then cover with corn-stalks, and put up long boards to rest on the ridge-pole, and cover with earth. When I use out of one end, I keep an abundance of oat-straw or hay, so as to preserve them entirely from changes of the atmosphere. I believe corn-stalks are better to place next the potatoes, as they will absorb the moisture measurably, and do not settle down so packed and close on the potatoes as grass does. When I have used grass the potatoes did not keep so well. Every farmer and planter should plant half an acre of potatoes to each hand, as they will feed anything but men and dogs *raw*; horses, cattle, hogs, and sheep, will all eat them greedily. A favorite mare here will absolutely paw the earth to get at them, and she will walk all over a potato patch in search of them, instead of going into a pea field. Yours truly,

M. W. PHILIPS.

For the American Agriculturist.

BLIGHT IN PEAR-TREES.

A. B. ALLEN ESQ.—DEAR SIR: In the August No. of Vol. I., of the American Agriculturist, I find a notice of the blight in pear-trees. I will give you my observations on that subject the past summer, and although very imperfect, they may throw some light on a subject that is enveloped in mystery, notwithstanding all the numerous causes and preventives that have been published. On the 23d of May last, I was observing a pear-tree, some of the branches of which were dead, others with the leaves turning brown, the fruit dropping off, and what is peculiar to this disease, the branches in another part of the tree appeared perfectly healthy, and vegetation in full vigor. I commenced paring off the bark on the diseased branches, which presented quite a red appearance, and in places a reddish liquid was exuding through the bark. In these spots (after taking off the outer bark) there was a very small hole about the size of a number 10 sewing-needle, and on removing the inside bark to the wood, there the little destroyer was esconced, feeding on the life of the tree, to which they must be a deadly poison.

They were near, and in the body, and for several feet up and down, the bark and wood were stained as above. I shaved the bark all clean where the tree was affected, which was on one side from the roots to the branches. I found only six of the insects; they are inactive, about the size of the hole mentioned, and above the sixteenth of an inch in length. They have six legs, the sides a deep green, the rest part of a brownish color. They insert about half the length of their body in the wood. I was pretty well convinced at the time, that these insects were the cause of the disease, but they may simply be the effect of it. They do not appear to be a migratory insect, for there were other pear-trees standing within fifty feet of this one, unaffected two years ago. The tree which stood near this one died branch after branch, until the top was all cut away. Now this is one stage of the insect; and if we can find out its habits, there will be some chance for a remedy.

Professor Main, in his excellent treatise on the Physiology of Plants, mentions this disease called American Blight, and states the cause to be a very small insect, which, in its early stages, is not discernible with the naked eye. He calls it the *coccus*, or *Mealy aphis*, a species of the *Cochineal* fly of commerce. The effect produced coincides with my observations; but the insect as I saw it differs in color from the one he describes as doing the mischief. He says they are so light that they are easily wafted from tree to tree, which can not be the case with this one I speak of. Apple-trees are subject to a similar disease, and I have discovered the red juice, and the red appearance of the bark and wood, but not the insects.

There is another insect that works upon the pear-tree, giving it the appearance of blight, but it is not the cause of the destruction of our pear-trees. The fly deposites its egg in the tender part of the end of the twigs, and hatches into a brown grub. When full grown, it is about an inch in length. It eats out the wood, and leaves the bark entire for its habitation; of course the twig dies, the leaves turn brown, which gives it much the appearance of blight. I have cut off these twigs and found that they were hollow for six or eight inches. I can tell you nothing about the habits of this insect.

Weights, and pressing into lard of four pigs.—I will give you a statement of four pigs raised and fattened by one of my neighbors, David Hadley; not for their great weight, but showing the profit for the keep. The weights were 502, 456, 418, and 414 pounds, at eighteen months old.

The heaviest one had corn all winter, what he would eat, and corn and slop from the house during the summer; the other three had four ears of corn per head a day through the winter, and run on blue grass pasture through the summer. The owner told me he had fed them about fifteen bushels of corn per head since he put them up to fatten. They were perfect pictures of the grunting family, and when killed they were skinned, and all rendered into lard, except the hams and shoulders. They turned out 1,200 pounds of good No. 1 lard. The object in skinning was to keep the gum and oily matter in the hides out of the lard.

They were half Grazier, of Mr. Neff's stock of importation; the other half were what he calls his Liverpool hogs, you will recollect them.

To destroy bugs on potato-vines.—An old gentleman informs me he has completely mastered the potato bug, by boiling up the roots of the mullen, and sprinkling the liquor on the tops early in the morning. He says it has the same effect on tomato-vines.

Remedy for sore teats and inflamed udders.—White-lead and sweet-oil are excellent for cracked or sore teats of milch cows.

Flax-seed oil, well rubbed on the udder when inflamed and caked, will allay inflammation and soften the hardness of the bag. Rub well twice a day until the inflammation subsides.

With much respect,

E. CARPENTER.

Brier Patch Cottage,
Warren Co., Ohio, Feb. 20, 1843.

For the American Agriculturist.

CURE FOR INFLAMED EYES OF THE HORSE

Middletown, Ohio, Feb., 1843.

MR. A. B. ALLEN: Notwithstanding my occupation requires my attention and exertions, in attempting to cure or palliate the "ills that flesh is heir to" in the human species, my sympathies have been occasionally enlisted in behalf of that noble animal upon which we are so much dependant for many of our pleasures and comforts, and derive so much important service—the horse, in consequence of the empyric and barbarous treatment frequently practised upon him.

If the animal who claims for himself the image of his Maker, is willing to indulge in "Brandreth's Pills, Lobelia Magnetic Ether, and Jew David's Plaster," and write for his epitaph, "I was well, took physic and died," let his curiosity be gratified; but while we assume to ourselves the guardianship of the fourfooted part of creation, let us discharge the duty in that manner that shall at least entitle us to the virtue of humanity.

Not unfrequently when I have been giving my horses high feed and severe service in hot weather, over hard and dusty roads, I have observed them frightened and shy from objects to which they usually paid little or no attention; and upon examination of the eyes, have discovered the external membrane (*tunica conjunctiva*) thickened so much as to impair or obstruct the vision, presenting a whitish appearance occasionally in spots, but frequently involving the entire membrane covering the organ. At this discovery many kind friends, actuated by the best of motives, would volunteer their aid and advice, for the purpose of removing the difficulty. Mr. A., exhibiting an air of great confidence in his skill in such matters, would say: "You must pound glass until it is very fine, and blow it into the eye through a quill, to *cut the scum.*" A remedy, or rather an intended remedy, that would most assuredly render him blind, even though the disease should fail to accomplish that result. Then comes Mr. B.: "Sir, you must blow burnt alum in that eye." Mr. C., quite as knowing as his neighbors in these affairs, makes the

following prescription: "Blow powdered *blue stone* into it, and rub a little rabbit's grease above the eye, and my word for it, to-morrow morning it will be as bright as a diamond."

By just such treatment many a noble roadster has been prematurely consigned to the cart or treadmill; whereas, had the matter been intrusted solely to the operations of Dame Nature, the result would have been widely different.

The course that I invariably pursue in such instances, is to keep the animal in a dark stable, to be fed upon hay, or if practicable, fresh cut grass and coarse bran—bleed freely from the mouth, and administer one and a half pounds of Glauber salts, two drams of nitre, and fifteen grains of tartarized antimony in a bucket of water, and repeat the same daily until a free purgative operation is produced. The animal will be invariably found in a feverish condition, and if kept from water for a short time will drink the mixture freely. If these means do not soon produce a salutary impression, I bleed from the large vein immediately below the eye. By placing the thumb of the left hand firmly upon the part, the vessel soon becomes distended, and the operation may be most conveniently performed with a common spring lancet. By this means I have frequently succeeded in extracting from 12 to 20 ounces of blood, which has acted like a charm, by relieving the engorged vessels of the inflamed membrane. The whitish or sometimes yellowish appearance, depends upon the effusion of coagulated lymph deposited during the acute stage of the disease. When the absorption of this does not progress freely, and the eye fails to assume its accustomed lustre and transparency, I blister a semicircle below the eye, one and a half inches in diameter, by applying daily with the point of the finger, a mixture of three parts of the common blistering preparation as obtained from the druggists, and one part Venice-turpentine. Sometimes the other membranes of the organ become diseased from similar causes, to remedy which, the foregoing treatment as detailed will be applicable. Care should be observed in not too suddenly exposing the patient to a strong light, high food, or active service.

Thus, I have given you, as our Buckeyes term the science, a chapter on "horse-doctoring," and if you perceive anything in it that will repay you for the trouble, you are at liberty to publish it, with the promise, if it meets your approbation, of resuming the subject in some future number.

ANDREW CAMPBELL, M. D.

For the American Agriculturist.

POUDRETTE AS A MANURE.

A. B. ALLEN, Esq.: I wish to avail myself of a small space in your excellent journal, to call attention to the subject of Poudrette as a manure. You are fully aware of the importance to the cultivator of the soil, of a good supply of manure; and your experience at home, and your observation in Europe, enable you to appreciate the value of portable or concentrated manures. *Poudrette* has long been in extensive use, and held in high estimation in France, and *crushed bone* is extensively used in England, to great advantage; whilst in this country there is only here and there one, comparatively speaking, who has used either, or who appreciates their value as fertilizers.

It is nearly six years since the first effort was made in this country to prepare poudrette, and introduce its use among the farmers in the vicinity of New-York; but owing to various circumstances, its use has not been extensive until the two past years, during which it has rapidly increased, and *is* still increasing. The present indications are, that the demand will increase more rapidly than the supply; and that in the vicinity of all large cities and towns, it will soon be in general use, as far as it can be obtained.

There has been a strong prejudice in the minds of many, who know nothing of its value, against the use of poudrette; yet, in *almost* every experiment from which I have heard any report, it has been successful, and in many cases *eminently* so. It has been extensively used on Long Island, both on a sandy and clay-loam soil with great success; also in New-Jersey near the seacoast, as well as in the interior; also along the Hudson river, and in Connecticut, Rhode Island, Massachusetts, and New-Hampshire near the sea coast; and in Maryland, Virginia, North and South Carolina, and Georgia, in small quantities, to the satisfaction in almost every instance, of those who tried it, or saw its effects.

The question is often asked, "On what soils is it most useful?" In reply to which, I can only say, that so far as I can judge, it will be found useful on any soil, and on *all* soils; but probably *most* so on a sandy-loam, or light soil with ordinary rains; but in a *dry* season, I think it will do best on a clay-loam. Some of the most satisfactory experiments which have been made were on the poor sandy lands in Monmouth County, New Jersey.

Those farmers who have to *purchase* manure, and haul or transport it any distance, will find it for their gratification, and I think for their *interest*, to make an experiment with poudrette in comparison with other manures. It is estimated by good judges, that one bushel of poudrette is equal in fertilizing properties, to *fourteen* bushels of good stable manure,—some say *twelve*, and others *sixteen;* but I estimate it fully equal to fourteen bushels. If this estimate of its relative value is correct—if a barrel containing *four* bushels is equal in value to *sixty* bushels of stable or yard manure, then certainly lands may be improved which have heretofore been considered of little value, as the cost of transportation is comparatively trifling.

I send you herewith a pamphlet, containing reports from practical farmers in New-Jersey, New-York, Connecticut, and Rhode Island, some of whom have used large quantities of poudrette for several years in succession, on various crops and different soils; and but for the crowded state of your columns, I should request you to publish some of them, as I am aware that your readers will prefer to have the *facts*, in the language of those who recorded them, rather than my opinions. On this particular point I agree fully with them, and will therefore give a few paragraphs, though I would much prefer to give as many pages, from the pamphlet.

Dr. Josiah Bowers, of Smithtown, L. I., who has used over 3,500 bushels of poudrette within the last five years, says: "One half of another field of *ten* acres was planted with a gill to the hill, and the next day the other half of the same field was planted without any manure. Both parts came up equally well, but that treated with poudrette very greatly exceeded in rapidity and vigor of growth, being at least twice the size of the other at the time of *second* hoeing. At this period I applied an equal quantity of Poudrette per acre, to that which had none at planting, as had been put in the hill of the first, sowing it on the ground at broad cast, and working it in with the cultivator and hoe. The result answered *fully* my expectations. That matured in the hill maintained its superiority for a short time, but it soon became visible that its *rival* was gaining upon it; and when cut up no material difference could be perceived in the crop, both being excellent for the season."

Dr. Bowers says also in a letter of more recent date: "Another year's experience in the use of poudrette has, if possible, increased my confidence in its great utility. My opinion of its value on most crops was expressed in a former communication; and the correctness of that opinion has been fully confirmed by further use. The past season I applied it principally to oats and wheat; and it may be sufficient to say, that the result was entirely satisfactory. Indeed, the convenience and advantages resulting from the use of this article are so great, that one accustomed to possess them would hardly think himself able to carry on farming without them."

Mr. Fullagar, an experienced gardener, in the employ of S. W. Anderson, Esq., at Devoes Point, Westchester County, speaks of its astonishing effects on watermelons, as follows:

"I planted watermelons in rather poor and gravelly soil in 1841, by digging holes 18 inches wide, and put one quart of poudrette, mixed well with earth in each hill; when the plants came up, I added one pint more of the poudrette to each hill, spreading it about 3 feet, and hoeing it well in. The effect was that the vines grew vigorously, and in the small patch of 3 square rods of ground I gathered 63 melons, weighing from 30 to 40 pounds each.

"I gave some of the same seed to a neighbor of mine, who planted it by mixing one shovelful of good yard manure to each hill: the soil was the same as mine, and the largest melon produced in the patch did not weigh over 18 pounds. When he discovered the difference, he at once made up his mind to subscribe for a share of your stock, which he has done, and is well pleased with his bargain."

Mr. Edward Condict, of Morristown, N. J., in a letter dated July 25, 1842, says: "Early in October last, I used the poudrette on a loamy soil, somewhat inclining to clay, which I had prepared for wheat. There was no difference in the soil nor in its preparation, except that on about one-fourth part of it, after the wheat was sown, about twenty bushels of the poudrette to the acre was also sown, broad cast; and the result is, that on harvesting that part where the poudrette was put is much the heaviest grain, and but very little injured with the rust or mildew, while the *other* part of the field is considerably injured.

"I am so well pleased with the poudrette, that I shall for the future discontinue the practice of using barn-yard manure in the hill."

Dr. Henry Fish, of Salisbury County, in a letter dated Aug. 4, 1842, says: "*I have found poudrette sprinkled on vines, the most effectual application to destroy insects* which were eating the leaves or stalks, more particularly the large black insect which destroys the vine of the winter squash in autumn. I have not been troubled with worms in the corn field since I have used poudrette; but I do not infer from my limited experience that it will always prevent their ravages."

I could go on indefinitely almost with similar statements, but I dare not extend.

D. K. Minor.

118 *Nassau Street, N. Y.*

For the American Agriculturist

HORTICULTURAL CALENDAR FOR APRIL.

During the past month the weather has been unusually cold, and the season consequently so retarded, that the calendar of the last number will answer, generally, for this. It is frequently the case, when the season is very late, that vegetation comes forward with an increased degree of rapidity, and, unless some care is exercised, will often be in full vigor before the cultivator shall have finished transplanting. He should, therefore, make this his *first* business, on the frost leaving the ground; seeds can be planted, and other work performed, at a subsequent period.

Kitchen garden.—During this month, early cucumbers, melons, cabbages, cauliflowers, lettuce, radishes, &c., which have been brought forward in the hot-bed, should be transplanted into the open ground. The asparagus bed be attended to, if not prepared before, according to the directions of last month. All kinds of table vegetables and early root crops can be sown in the open ground. Tomatoes, egg plants, and peppers, that have been forwarded in pots, can be planted out the latter part of the month.

Fruit Garden and Nursery.—All kinds of fruit and forest trees, and shrubs, should be transplanted this month, before the leaf buds shall have come out. All grafting and spring inoculating performed. Strawberry beds dressed and cleaned. Currants, raspberry, and gooseberries, that have not before received atten tion, can now be pruned; the latter should be pruned to open heads for the admission of sun and air, be well manured about the roots, and the soil made loose and mellow with the spade; the roots of peach trees be examined, and the worm cut out with a knife. Cuttings can also be made for the purpose of grafting, for the propagating of trees and shrubs.

Ornamental Grounds.—Bulbs that have not yet started ought now to have the earth about them stirred, to the depth of three or four inches. The borders of the flower garden be made up, and perennial herbaceous plants transplanted. Seeds of annuals should not be sown until next month. Hedges and shrubs may be trimmed, and box-edging set out. Put in order the gravel-walks and pleasure-grounds, and, if necessary, give the lawn a top-dressing of ashes.

S. B. Parsons.

FOREIGN AGRICULTURAL NEWS.

By the steam-packet Columbia, we have our files of European journals up to the 4th March.

Markets.—Cotton has fallen ⅛d. since our last advices. The importation into Liverpool was very large, but the sales, we are glad to see, correspond—130,000 bales having been taken during the last month; and it is calculated that the low price will have a decided tendency to increase the consumption of this great staple. Cotton is now lower by one penny per pound than it was ever known before.—In flour, there seems to be nothing doing, and the price has given way 1s. per bl.—Tar and turpentine are nominal.—Tobacco has fallen ¼d. per pound. An extensive business was doing in it, and the market, a few days before the packet sailed, had become quite firm.—Quercitron bark dull.—Ashes the same.—Tallow has improved.—Beef, Pork, and Lard, of this year's packing, after the English method, are selling well, and much liked.—Rice has fallen a trifle.

Money is as abundant as ever, and large sums are lying in the hands of capitalists unemployed. The Columbia brings out one and a half million dollars of specie. The rate of interest continues as low as before—1½ to 2 per cent. The Bank of England is discounting at 3 per cent.

Great Snow Storm.—The snow seems to have fallen as deep in England, almost, as here, and it is possible it may have an injurious effect upon the coming crop of wheat.

The Corn Laws.—Wheat and flour, by the way of the St. Lawrence, whether of Canadian or United States production, it is thought, will be admitted soon at a mere nominal duty. If so, it will greatly benefit the West.

American Credit still stands wretchedly low in Europe, and seems to be in a pretty hopeless way.

Sheep Breeding.—In the New Farmers' Journal, we see that Mr. Richardson, of Lincolnshire, has great faith in what he calls his improved or new Leicesters, and offers to show three weathers, for fifty guineas, against any other breed in England, at the forthcoming meeting of the Royal Agricultural Society at Derby.

Buffaloes in Smithfield Market.—Several of these were imported from Gibraltar, and sold readily there; whether for meat, or as objects of curiosity, we do not see stated.

Influenza among Stock.—This contagious disorder seems to continue with unabated violence in England. One extensive cow-keeper, in the vicinity of London, lost 170 cows from his herd, and another 40, within four weeks.

Breeding Rabbits.—A farmer in Ringmer, who had bred rabbits for some years, says that they have paid him as well as a flock of sheep, and he annually sends 7,000 to the London market.

THE FARMERS' HERALD, *edited by William H. Evans.*—This is a new work, of 16 pages, double columns, somewhat larger than our own, issued monthly, at Chester, upon the same principle as the agricultural publications of America. The price is 3 pence per number, *stamped edition*—equal to 72 cents a year of our money. We often asked, when in England, why a cheap work for the farmer was not issued, but never received a satisfactory answer. We have the first three numbers of the The Farmer's Herald now before us. It is handsomely printed, with clear type, and on fine paper, and is edited with variety, spirit, and ability; and we hail its appearance with great pleasure. Its low price must insure it a large circulation among the small farmers, who have hitherto, unfortunately, been cut off from much valuable agricultural information, in consequence of all the periodicals on this subject heretofore published in England being issued in too costly a form for their means. We tender our best wishes of success to the Herald, and condense some paragraphs from its quoted matter.

Cure for the Red-water in Cattle.—Take a mixture, of equal parts of oleum philosophorum, oleum aspic, and oleum terebinthum, and put sixty to seventy drops in half a quart of lukewarm water for a middle-sized cow, and from thirty to fifty for a calf. If it does not cure in twelve hours, repeat the dose.

The Epidemic among Cattle in Ireland is called pleura-pneumonia, or galloping consumption, and is thus described: Acceleration of the pulse, which ranges from 80 to 120. The animal invariably hangs the head, accompanied by dryness of the muzzle; the flanks heave according to the severity of the disease; a husky cough, weeping from the eyes, total loss of appetite, grinding of teeth, secretion of the milk suspended, the belly drawn up, a low moaning, together with a grunt at every expiration—the lungs appearing, also, to be filled by a painful effort only. These symptoms are all progressive.

The treatment should consist of active blood-letting, when the first symptoms appear, to be repeated afterward, if necessary—followed up by sedative medicines and general spare diet. When an animal is seized, it should be bled at once, this remedy being peculiarly applicable to affections of the lungs, and the best advice should be procured. If this treatment be not followed in the early stages, rapid effusion sets in, and no power can save the animal. From observation, we are also of opinion that high bred and highly fed cattle are more subject to attack than those which have been less attended to.

Importation of Alpacas.—Seventeen of these splendid South American sheep have recently been imported into Liverpool. They had been five months upon their voyage, but arrived in fine health, and are for sale, by the lot, for £350. The Earl of Derby sheared a fleece of 17 lbs. weight from an Alpaca last year. We are of opinion these animals would flourish better in our climate than in England; it being drier, and more like their native region of the Andes. We think, however, from what we saw of them abroad, that they would be more ornamental than profitable to the American farmer.

Changes in Composition of the Milk of a Cow, according to its Exercise and Food.—The Chemical Gazette reports a lecture on this subject by Dr. Playfair. He has adopted a modification of Boussingault and Lebel's method of analysing milk, which he recommends as more exact; and he finds considerable difference in the amount of butter produced from it when the cow is at rest, or when exercising. We quote from the lecture so much as regards this subject, as being somewhat curious:

The cow being in good milking condition, and at the time fed upon after-grass, he ascertained the average amount of her milk for five days, and then proceeded to analyse it. In the first day it was observed that the milk of the evening contained 3.7 per cent. of butter, and of the following morning, 5.6 per cent. The deficiency in the first observation is referred to the consumption of a greater portion of the butter, or its constituents, from respiratory exodiation during the day, when the animal was in the field, than during the night, when it was at rest in the stall. When confined during the day, and fed with after-grass in a

shed, the butter amounted to 5.1 per cent. When fed with hay, the butter was 3.9 and 4.6 per cent. When fed with portions of potatoes, hay, and bean flour, the butter was 6.7 and 4.9 per cent.; with hay and potatoes, 4.6 and 4.9 per cent.

The author then examines Dumas's theory of the origin of fat in animals, in reference to the foregoing experiments, and concludes, in opposition to that theory, that the butter in the milk could not have arisen solely from the fat contained in the food. Hence it must be produced by a separation of oxygen from the elements of the unazotised ingredients of the food of the animal, in the manner pointed out by Liebig. He then quotes, in favor of the same conclusion, several experiments of Boussingault, and observations of dairymen in different localities. Potatoes are particularly favorable, both to the flow of milk and increase of butter, from the starch they contain. So malt refuse. Porter and beer are also well known to be favorable to the production of butter, both in the milk of women and of the cow, although these fluids do not contain fat.

The production of caseine in the milk is then considered in reference to the quantity of albumen in the food supplied on different days to the cow, and to the supposed destruction of the tissues by muscular exercise. Pasturing in the open field is more favorable to the formation of caseine, while stall-feeding is more favorable to the formation of butter. It is then shown that the proportion of butter in the milk of woman is increased by rest and the diminution of the respiratory oxidation.

From the proprietor of the London New Farmers' Journal, we have received three cuts of Mr. Thomas Bates's celebrated Short-horns, viz: Dutchess 34th, Duke of Northumberland, and Cleveland Lad. We give the portrait of the former on the opposite page, and the two others will follow in succession for May and June.

Dutchess 34th is the most splendid cow we ever saw, and we know of nothing that can compare with her, except two three-year olds that we were shown along side of her at Kirkleavington. She is descended from the old stock which has been bred in Durham for two centuries, and has the distinctive mark of the short, fine, clear, *upturned*, waxy horn, peculiar to this superior tribe. She is now nine years old, has had eight calves, and, though repeatedly shown against the best cows in England, has never been beaten. She was offered a few years ago, by her breeder, to come to America, but was declined, as we understand, through the influence of Mr. Whitaker; whether because he was not aware of her merits, or that he thought she would make too fine a show along side of much that he sent out here, we did not learn. Had our breeders possessed her, and a few others, at the time offered, our Short-horn stock now could not be beaten in England; as it is, we must still continue to purchase for improvement. If the committee for the forthcoming Show and Fair of the New York State Agricultural Society, wish for a model to judge cows by, at the meeting at Rochester next September, we commend to them the superb outline of Duchess 34th. For the history and tradition of this stock, and all particulars regarding it, we refer the reader to September and November Nos. of this paper.

Introduction of American Roses.—For the information of our western friends, we notice in the Gardener's Magazine, that two new American roses have been recently introduced into England, viz: the *Rosa rubifolia elegans*, the Prairie Rose—and *Rosa rubifolia*, the Prairie Queen.

Predilection of English ladies for Gardening.—Some young ladies lately residing in London, where they have no garden, have contrived a very ingenious substitute for a hot-bed, by having recourse to their side-pockets as a source of heat for germinating seeds. The seed, enveloped in some moist moss, is put in a small tin case, commonly one which has been used for peppermint lozenges, or acidulated drops. The case, so filled, is carried about the person constantly during the day, and put with the pocket under the pillow during the night. When the seeds have germinated, and the plumule, as well as the radicle, has appeared, the seed, having now become a plant, is taken out and planted in a pot. The same ladies have germinated seeds by suspending them over water in a hyacinth glass, or small carafe; and in this manner they have raised trees from filberts, which, being afterward planted in the open ground in the country, have, in the course of a few years, borne fruit. They have also raised oaks, sweet-chestnuts, and various other plants.

Recipe for destroying the Bug, Scale-red Spider, and Green-fly, in Hot-houses.—Take half a pint of stone lime, and half an ounce of black sulphur, and mix them well up together in four gallons of water.

Veterinary Medicine.—Under this head, the Edinburg Quarterly Journal of Agriculture for March, has a review of Percival's second volume, of 400 pages, on the Disorders and Lamenesses of the Horse; A Manual of Veterinary Science, by Dick; and a German work on the same subjects; and, by way of calling attention to the importance of a better knowledge of the veterinary art, estimates the value of horses, cattle, and sheep, in Great Britain, at £120,000,000 sterling (10,000,000 higher than stated in our last); and that there is a loss of two millions sterling annually to the nation, by disability, disease, and death, over what there probably would be, if a proper knowledge of practice prevailed in regard to the treatment of those animals.

The Works of George Sinclair.—These works have passed to a new edition, under the supervision of Cuthbert W. Johnson, Esq.

Destroying Insects.—The Gardener's Gazette suggests, as one means of destroying insects that are injurious to fruit-trees and vineyards, to light piles of brush-wood when they are about depositing their eggs, and that, attracted by the light, they will fly to it by myriads, and thus perish in the blaze. Often, when engaged in the exciting sport of spearing fish by night, in the clear streams of New England, and on the Niagara, have we had our torch-lights literally extinguished by clouds of insects from the adjacent forests, and been obliged to return home quite *fishless*.

Cultivation of Wheat.—We find in the Farmers' Magazine that the Chelmsford Club decide, from experience, that salt and lime, applied to the seed of wheat (probably in the same manner as we do here in the United States), are destructive to the slug and wire-worm; and that lime is beneficial to the crop, both before and after sowing it; that a good clover ley is best calculated to produce a full crop of wheat, and a bean or pea etch is the next best preparation. The March number of this periodical we find rather a dull one. It is entirely too much filled up with Guano as Manure—making the whole subject a regular *bore*. The engravings are a fat Durham cow, and a fine pig of the Yorkshire Grazier breed.

To fix Ammonia, and disinfect Night-soil.—Add two cwt. of gypsum to one ton of night-soil, and it will fix the ammonia, which contains the nitrogen. Burnt bones will also fix the ammonia, and disinfect the

DUTCHESS 34TH.—(FIG. 6.)

The Property of Thomas Bates, Esq., Kirklevington, England.

night-soil. Dry coal-ashes, and charred substances of any kind, are destroyers of the bad smell. Soot mixed with saw-dust answers both purposes.

JOHNSTON'S LECTURES ON AGRICULTURAL CHEMISTRY AND GEOLOGY—28th and 29th Nos.—The principal subject these numbers discuss, is the change of soil and grasses; and practical experiments are given on different methods of cultivating roots, grain, and grass crops.

Cure of the Glanders in the Human Being.—In the Veterinarian for March, we find an account of a French groom being cured of this disease in Paris. The case is pronounced *unique;* for, in all the instances of glanders in the human subject hitherto reported, the disease has universally proved fatal.

Nitrate of Soda.—The Gardener and Practical Florist states, that two cwt. per acre is recommended for farm crops; 6 oz. in 4 gals. of water for celery; 1 lb. in 12 gals. for dahlias; 1 oz. to 1 gal. for strawberries; and 1 lb. to 8 gals. for onions.

Gas Liquor, such as was formerly turned into the Thames, used in the proportion of 3 parts to 20 of water, has been tried on grass, and found to quadruple its product.

Grafting Wax.—Take 4 oz. pitch, 4 oz. resin, 2 oz. beeswax, and 1 oz. lard, and melt them well together.

PAXTON'S MAGAZINE OF BOTANY, for March, is embellished by the *Echites splendens*, splendid echites; *Manetha bicolor*, two-colored flowered manetha; *Digitalis purpurea superba*, purple foxglove, superb variety; and the *Campanula grandis*, large bell-flower—in the usual beautiful coloring and truthful drawings of this superb work.

STEPHENS'S BOOK OF THE FARM.—Part XII. is received. The subjects of which it treats are, the corn markets, forming dunghills and liquid manure tanks, irrigation, cows calving, and of calves.

Cultivation of Sugar-cane.—Among the new works lately issued upon agriculture, and which may interest our southern readers, is a volume called The Nature and Properties of the Sugar-cane, with Practical Directions for the Improvement of its Culture, and the Manufacture of its Products, by George Richardson Porter. It is a work of 240 pages, large octavo, illustrated with engravings; and the price here is $3 25.

Through the politeness of the Secretary of the American Institute, we are favored by the following letter from one of its officers, now travelling in Europe, and hope to hear from him occasionally direct, during his stay there. This letter should have appeared two months since, but accidentally got mislaid.

SMITHFIELD CATTLE-SHOW.

LONDON, *December* 17, 1842.

T. B. WAKEMAN, Esq.

MY DEAR SIR: By this conveyance, I forward you a parcel containing a paper—the Illustrated London News—profuse in particulars of the recent Great Cattle Show of the fat cattle of England, held in London. In the parcel are also a number of Bills which I collected among the various exhibitors of agricultural implements, most of them having wood-cut representations of the machines to which they refer. I deem this the best means of conveying to you the form and construction of the most favorite articles in this line in use here. Among the hardware articles was an axe, polished and blued in imitation of Collins's, in Connecticut. The maker's name is Fenn, and it was labelled "The celebrated American Axe, with which they fell their great forests." Although not as well shaped as the original in our own country, or as well finished, it was decidedly the prettiest and most showy thing, in the hardware line, in the exhibition. The variety of plows, straw-cutters, cultivators, seed-planters, &c., was very numerous and extensive.

I also send a small parcel containing a sample of compost manure, which has been used here with great effect. It contains blood, oil, charcoal, and, I believe, ammonia. The proprietor was on the ground, and took many orders. It is calculated particularly for a loose, porous soil, like Long Island. It is now black and damp, like coarse French snuff, when fresh; but I suppose it will be dry when you get it. A poudrette man was near by, but this person outsold him—see bill inside the parcel. The specimens of beets, carrots, turneps, and parsneps, exceeded anything in size and perfection of shape I have ever seen. Of the animals, it is needless to say, that, for beauty of proportion, smallness of bone, and excess of fat, they exceeded all of which I had ever before any conception. It is said to have been the finest show of fat cattle ever seen in England.

Inasmuch as the exhibition was in the extensive Horse-Mart and Carriage Repository, adjoining the great Baker-street Bazar, a passage was made to communicate therewith; and as this place is occupied as a kind of market for the sale of all kinds of goods, wares, and merchandise, arranged on stalls attended by females, the *toute ensemble* made up, perhaps, the most perfect exhibition that an English Institute could make at this day. The place, during the week, was the most *fashionable* resort in London for the nobility and gentry. The space was kept remarkably clean, and, for comfort and convenience, did great credit to the managers. The English farmers, in their frocks, in attendance on the beasts, added not a little effect to the general interest of the show. Were I to go into details, I fear I should be thought too prosy; and I only wish you had been here to have attended.

The surprising increase in the perfection of well-bred animals in this country, for the few past years, is only positive evidence of that success which awaits the mass of American cattle-breeders, instead of the few at the present time. The mutton here is decidedly superior to ours. In fowls, we surpass them altogether. In fruit, we are far before England, in variety and flavor, except in pears; and this fruit is much superior, in taste and variety, to what we have produced. I speak of the fruit found, during the seasons of its perfection, in the great London vegetable mart, Covent Garden.

Editor's Table.

☞ NOTICES OF THE PRESS.—We have received several valuable works to notice this month, all of which are in type, but unavoidably omitted till our next, for want of room. Among them are Downing's Cottage Residences, one of the most tasteful and useful books of the day; Travels over the Rocky Mountains and in the Oregon Territory, by Rev. Thomas Farnham; Hon. H. L. Ellsworth's Report—the last two published at the Tribune office, and for sale at 25 cents each; Stephens's Book of the Farm; Paxton's Magazine of Botany; The Zincali, by the Rev. George Borrow, author of Bible in Spain—two editions, one 25 cents, and the other 38 cents; Prof. Murray's Encyclopedia of Geography; Johnson's Encyclopedia of Agriculture, by an American editor, at $4—one fourth the price of the English edition; Liebig's Animal Chemistry, new edition, at 25 cents; &c., &c.

TO CORRESPONDENTS.—R. H. Hendrickson, Geo. W. Williams, J. Dinsmore, E. Cornell, Viator from Wiskonsan, Examiner, George W. Taylor, C. N. Bement, F. T. Vail, and T. M. C., will appear in our next. We beg pardon of the latter for not inserting his communication this month. It was put in type, but, in making up the paper, was accidentally omitted.

E. C. is informed that Bellfounder will stand at Middletown the ensuing season. See advertisement.

T. B. S. Your books and seeds are sent to Philadelphia, as directed.

A. B. The same.

J. D. We are promised an article on the cultivation of Madder, &c., for May No., from the pen of a practical man. You will see part of your inquiries answered by back Nos. of American Agriculturist just sent. All others will be replied to privately, in a day or two.

G. W. W. The same.

Z. A. P. Your plows were shipped on the 30th ult. They could not possibly be got ready before. Cultivators are promised in a fortnight. To suit you, we had to get new castings, and an article made under our own direction.

B. A. F. You were sent the catalogues.

F. T. V. The Orange bark and remittances are received. Your inquiries shall be answered in our next, if possible to get the information. In the meanwhile, see if you find nothing under head of Foreign News, in our last three and this No., to your purpose. The ink of your favor is so faded as to make it almost illegible.

T. A. & M. W. P. Plows, books, &c., shipped this day.

A Friend to the Prosperity of American Independence is received. We have referred to the article in question, but, as it is eight years since it was published, we should suppose, if the grass were so valuable as there represented, it would have come into pretty general cultivation by this time. Will "A Friend," &c., grant us an interview, as we are disposed to make his offered premium public. We have seen hemp in Kentucky, dressed and bleached so as to appear like the finest flax; and we are of opinion that it may be manufactured into the best of paper.

W. H. S. The four quires of paper shall be sent in a few days, with the printed figures on them.

C. & F. Engravers in this city are easily obtained, but artists to take sketches and portraits are difficult to be found.

SIDE-HILL PLOWS FOR SALE.

BARNABY & MOOERS'S Patent Side-Hill and Level-Land Plows can be had at the following prices, viz: No. 2, wt. 45 lbs., $8: No. 3, 70 lbs., $10; No. 4, 80 lbs., $10 50; No. 5, 90 lbs., $11; extra edges, 50 cents. For colter, if added, laid with steel, $2; and wheel, $1 50; shin-pieces, 12 1-2 cents.

We give a few of the premiums awarded this superior plow, viz: by the American Institute, at their plowing-match at Newark, N. J., in 1840, the 1st premium—a silver cup. Also, by the same Institute, at their Annual Plowing-match for 1841, at Sing Sing, N. Y., a gold medal, for the best work done, lightest draught, and best principle of construction, answering for "general purposes." The 1st premium of the American Institute for 1842, and the 1st at Philadelphia the same year, and all the premiums in Tompkins county, as well as that of the New York State Agricultural Society, which awarded it an honorary premium of $30, and equal to the 1st at their Annual Plowing-match at Syracuse, for 1841.

The following are its advantages over the common plow, viz: 1st. Ease of draught. 2d. Perfection of work. 3d. Strength and durability. 4th. All dead furrows may be prevented, as the furrows can all be turned one way. 5th. Any width of furrow may be turned, between 8 to 18 inches, by moving the catches in the cross-piece, toward the handles for a wide furrow, and toward the centre for a narrow one. 6th. Placing the beam in the centre of the cross-piece makes it a "*double mold-board plow*," turning a furrow both ways at the same time; answering for green-ridging, plowing between corn or potatoes, or any crop cultivated in rows or drills, and for digging potatoes.

Orders for the purchase of Patent Rights, either by States or Counties, will receive immediate attention, and patterns of the various sizes furnished. Also, orders from Farmers, or others, for Plows, will be forwarded according to direction, to any place named, while the patent shall belong to me, if the money, or satisfactory references, are forwarded.

For further particulars, and cut of the plow, see Vol. 1 of American Agriculturist, page 370.

HENRY MOOERS.

Ithica, Tompkins Co., New York.

WHEAT-SHEAF FARM ON STATEN ISLAND FOR SALE.

A recent domestic bereavement has induced the undersigned to offer his residence on Staten Island for sale. It is situated midway of the outer bay, on the sea-shore, eight miles from the Quarantine ferry, three from that of Rossville, and equi-distant from two others—Seguin's landing, and Port Richmond.

The condition of the Farm, the extent, value, and practical usefulness of the improvements, and its peculiar advantages, are sufficiently known. It has been improved in a way to render it susceptible of six farming divisions of thirty acres and upward each, including an appropriate allotment of woodland; each division offering a moderately elevated building location. The condition of the soil is well known to be in the best working order.

Terms to suit the purchaser, as the object is merely to change the investment for another susceptible of equal product.

W. A. SEELY,

New York, Feb. 16, 1843. 218 *Fulton street.*

SHEEP FARM FOR SALE.

The subscribers offers for sale, or to let, their extensive Sheep Farm, situated in La Salle county, State of Illinois. The Farm consists of upward of 1,500 acres; over 400 being enclosed by substantial picket-fence, and improved; the balance, dry rolling prairie, and timber, most admirably adapted to sheep husbandry, for which purpose it has been used by the subscribers for the last two years successfully.

The Flocks of Sheep can be sold at the same time, if purchasers are inclined. They consist of over 1,500 good, strong, healthy, white-faced Cheviot breed; also, three fine Pauler Merino Bucks, purchased of a celebrated breeder at the east.

If the Farm can not be sold for cash, offers will be received for renting the same for two or three years.

Apply either to JOHN ROSE, Little Vermillion, La Salle, MURRAY & WARD, Chicago, Ill., or JAMES MURRAY & Co., Buffalo, New York; either of whom will give every information wanted.

THE FAST-TROTTING HORSE BELL-FOUNDER

Will remain at his old stand, Middletown, Butler Co., Ohio, the ensuing season. He is a bright blood bay, with black legs, mane, and tail; is 16 hands high, and weighs 1,200 lbs. He has trotted his mile in 2 m. 45 sec., and, as a roadster, is unequalled. Several of his colts, just beginning to appear, have proved equal to himself, and have sold from $150 to $1,200. This stock is well adapted to the saddle, road, or farm-work, and, for utility, nothing is superior to them. Address Dr. A. Campbell, as above.

Two 3-year old Stallions of Bellfounder's get for sale, very promising, and out of high-bred trotting mares. For price of these, address R. L. Allen, Buffalo, N. Y., or the Editor of this paper.

April, 1843.

COMMERCIAL GARDEN AND NURSERY.

The proprietors of this establishment have constantly on hand an extensive assortment, comprising every desirable variety of Fruit and Forest Trees, Ornamental and Flowering Shrubs, Roses, Bulbs, Dahlias, and a large collection of Herbaceous Plants, which they are prepared to dispose of on reasonable terms with a liberal discount to the trade, and to wholesale customers. European Privet, of a superior quality, for hedges, will be furnished at reduced rates. Also, Evergreens and Ailanthus, the latter of a large size, suitable for street planting. 10,000 Norway Spruce of small size can be furnished at very reduced prices. Great care has been taken to select the best varieties of thoroughly tested fruits from the most correct sources, and it is the determination of the Proprietors to cultivate only those kinds which ample experience has proved to be of superior excellence, and to succeed well in this country. They are also particularly careful to take no innoculations of grafts from trees whose variety has not been ascertained and accurately tested by the fruit itself—the only mode in their opinion, of ensuring perfect correctness. The varieties of fruit being thus kept entirely distinct, the Proprietors feel no hesitation in warranting the identity of the kinds, and they are persuaded that those who purchase cannot but be satisfied with the quality, both of the trees and of the fruit.

Catalogues with prices will be furnished gratis at either of the above places.

PARSONS & CO.

Flushing, L. I., near New York, 4th month, 1843.

Prince's Linnean Garden and Nurseries, Flushing, near New York.

The following new Catalogues, 32d edition, of this immense collection of Trees, Plants, &c., will be sent to every post-paid application, and orders will be executed with despatch.

No. 1. Fruit and Ornamental Trees and Plants.
2. Bulbous Flowers and splendid Dahlias.
3. Green-house Trees and Plants.
4. Garden and Agricultural Seeds, with low wholesale prices.
5. Wholesale Catalogues for Nurseries, comprising Trees of smaller size.

Feb. 28, 1843. WM. R. PRINCE & CO.

N. B. 150,000 Mulberry Trees, 4 to 6 feet high, of the finest varieties, for sale at low prices and liberal terms.

POUDRETTE,

Of the best quality, prepared by the New York Poudrette Company, may be had *immediately*, in any quantity, in barrels or in bulk, on application to the subscriber. Price, $5 for three barrels, or $15 for ten barrels, or 30 cents a bushel, if measured into wagons or vessels at the yard. Letters, post-paid, containing cash, will be promptly attended to, if addressed to

D. K. MINOR, *Agent*,

March 10, 1843. 118 *Nassau street, New York.*

Works pertaining to Agriculture for sale by Saxton & Miles, 205 Broadway.

Johnston's Elements of Agricultural Chemistry and Geology, 50 cents; Do. do. 1 vol. 12mo, $1; Gray's Botanical Text Book, $1 50; Lindley's Horticulture, $1 25; Gray's Agricultural Chemistry, $1; Downing's Landscape Gardening, $3 50; Do. Cottage Residences, $2 50; Liebig's Organic Chemistry, $1 25; Do. Animal Chemistry, $1; Buel's Farmer's Companion, 87 1-2 cents; Fessenden's Complete Farmer, 87 1-2 cents; Cobbet's American Gardener, 75 cents; Blacklock's Treatise on Sheep, 50 cents; The American Farmer's Instructor, $1 62; A Treatise on Cattle, $2 50; Dana's Muck Manual, new edition, 62 1-2 cents; Boswell's Poultry Yard, 50 cents.

The Young Mechanic, by the author of The Young Merchant—a book for every American Mechanic, well worthy the attentive perusal of all who desire to attain eminence in their profession. Price 50 cents.

D'Aubigne's History of the Reformation, complete in 1 volume, at 75 cents and $1.

Borrow's Bible in Spain, containing the most interesting incidents in the life of the author, during a residence of five years in the Spanish peninsula; 50 cents.

A Book for every American—Pictorial History of the United States, from the discovery of America by the Northmen to the present time, by John Frost, Professor of Belles Lettres of the High school of Philadelphia—embellished by upward of *three hundred* original Cuts, designed by Croome expressly for this work—now in progress of publication, and to be completed in twenty numbers, at the unparallelled low price of 25 cents each; the whole forming four octavo volumes.

Agents wanted, to whom a liberal discount will be made; also, for the American Agriculturist.

Several new Works on Agriculture have been added to our list, which will be spoken of more fully in our next.

The Publishers desire to state, that any orders for Agricultural, or any other publications which the market affords, will be promptly attended to, if addressed to 205 Broadway.

SAXTON & MILES.

REVIEW OF THE MARKET.

PRICES CURRENT IN NEW YORK, MARCH 30, 1843.

ASHES, Pots, per 100 lbs	$5 12	to	$5 25
Pearls, do.	6 75	"	7 00
BARK, Quercitron, per ton	22 00	"	24 00
BARLEY, per bush	48	"	50
BEEF, Mess, per bbl	6 50	"	7 00
Prime, do.	4 23	"	5 00
Smoked, per lb	6	"	6½
BEESWAX, Yellow, per lb	28	"	29
BRISTLES, per lb	25	"	65
BUTTER, Table, per lb	13	"	15
Shipping, do.	5½	"	10
CHEESE, per lb	5	"	7
CLOVER SEED, per lb	5½	"	6½
CORN, Northern, per 56 lbs	55	"	57
Southern, do.	51	"	53
COTTON, per lb	4½	"	9
FEATHERS, per lb	19	"	27
FLAX, per lb	7	"	7½
FLAX SEED, rough, per 7 bush	8 75	"	9 00
clean, do.	9 25	"	9 37
FLOUR, Northern and Western, per bbl	4 75	"	5 00
Southern, per bbl	4 25	"	4 75
Rye, per bbl	3 25	"	3 50
HAMS, Smoked, per lb	6	"	7½
Pickled, do.	4½	"	5
HAY, per 100 lbs	52	"	56
HEMP, Russia, clean, per ton	200 00	"	—
Kentucky, water-rotted, per ton	165 00	"	180 00
Do. dew-rotted, do.	110 00	"	140 00
HOPS, per lb	9	"	12
HORNS, per 100	1 25	"	5 00
LARD, per lb	5½	"	7
LEAD, Pig, per lb	3½	"	—
Sheet and bar, per lb	4½	"	—
MADDER, per lb	10	"	13
MEAL, Corn, per bbl	2 40	"	2 75
Corn, per hhd	12 25	"	13 00
MOLASSES, New Orleans, per gal	19	"	20
OATS, Northern, per bush	32	"	34
Southern, do.	27	"	31
OIL, Linseed, per gal	85	"	93
Castor, do.	62	"	70
Lard, do.	65	"	70
PEAS, Field, per bush	—	"	—
PITCH, per bbl	1 25	"	1 37
PLASTER OF PARIS, ground, per ton	2 00	"	2 12
PORK, Mess, per bbl	7 37	"	9 50
Prime, do.	5 62	"	7 00
RICE, 100 lbs	2 13	"	3 00
ROSIN, per bbl	81	"	1 00
RYE, per 56 lbs	55	"	60
SALT, per sack	1 40	"	1 62
SHOULDERS, Smoked, per lb	4½	"	5
Pickled do.	3	"	3½
SUGAR, New Orleans, per lb	4	"	5¼
TALLOW, per lb	6¾	"	7
TAR, per bbl	1 25	"	1 37
TIMOTHY SEED, per 7 bush	15 00	"	16 00
TOBACCO, per lb	3	"	7
TURPENTINE, per bbl	2 50	"	2 75
WHEAT, Western, per bush	90	"	95
Southern, do.	81	"	90
WOOL, Saxony, per lb	30	"	37
Merino, do.	27	"	30
Half-blood, do.	22	"	26
Common, do.	18	"	22

New York Cattle Market—March 27.

At Market, 1,000 Beeves (660 from Pennsylvania); 100 Cows and Calves; and 900 Sheep.

BEEVES.—The advance of last week is fully sustained; and we quote to correspond—retailing cattle $5 75 *a* $6 75, with a very few extra, at $7; inferior to fair, $3 50 *a* $4 75. 100 unsold.

COWS AND CALVES.—Sales of 90, at $15 *a* $20 to $25 *a* $30 each, according to quality.

SHEEP.—All at Market taken at $1 25 *a* $2 25 to $3 50 *a* $6 50 for a few extra wethers.

REMARKS.—Money as abundant as ever, and specie a real drug—the Banks discounting all good paper that they can get hold of, at 5 to 6 per cent. Stocks of a first-rate character are still advancing. U. S. loan, 6 per cent., which was dull three months since at par, now sells readily at $107. New York 6 per cent. is worth $103, and 7 per cent. $104.

Cotton is very firm, notwithstanding the further decline of ¼d. in England. Instead of being 2,800,000 bales, as estimated early in the season, many think, now, the past year's crop will not exceed 2,500,000 bales.—Flour and Meal, we have quite a reduced stock throughout the States, and sales are effected at 12 to 25 cents per bbl. higher than last month. Grain, also, is scarce, and an advance has taken place.—Molasses is firm.—Provisions in good demand. It is estimated, that of the $2,000,000 worth of pork, bacon, and lard, put up at Cincinnati the past season, one fourth the amount was for the English and French markets direct.—Sugar is dull.—Tobacco quiet.

The Spring, thus far, is the coldest and most backward within our recollection. Snow is still upon the ground all around, and we are apprehensive that the immense bodies of it at the north will make late frosts, and endanger the coming corn crop. We advise the farmers to plant early varieties as much as possible, and hold on upon their produce for better prices; for we can not expect the coming season to be as favorable as the past was. Business generally, upon the whole, looks more encouraging than it has for some time.

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A. B. ALLEN, 205 Broadway.

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